CURRICULUM ALIGNMENT FOR BILINGUAL STUDENTS WITH AUTISM AND TEACHER'S PERCEPTIONS ABOUT PROFESSIONAL DEVELOPMENT TO SUPPORT INCLUSION

by
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Dedication

I dedicate this dissertation to the bilingual children with autism spectrum disorder and their families, who I have had the honor and privilege of learning from over my career as their Speech Language Pathologist.

I would not have this beautiful opportunity, if it was not for the life-long support of my parents, Juan Garcia and San Juana Flores, and extended family. Thank you for valuing my bilingualism and for the countless sacrifices you made immigrating to this country. I love and respect all of you.

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Abstract

Background: A review of the literature of preschool curriculum implemented with children with Autism Spectrum Disorder (ASD) revealed a significantly restricted number of evidence-based protocols available for public school classrooms. Although the legal precedent for inclusion in early childhood was established decades ago, the variables of ASD and bilingualism among children participating in Preschool Program for Children with Disabilities (PPCD) classrooms have only recently started to be explored by researchers. The problem of practice for this study is the ability to structure fusion of curriculum, integration of students, and teacher capacity, for a successful English Learner (EL) with ASD to effectively participate in inclusion. **Purpose:** The purpose of curriculum mapping is to identify commonalities and gaps between PPCD and bilingual prekindergarten scope and sequence after alignment with the 2015 Texas Prekindergarten Guidelines. Moreover, the professional development opportunities and teacher survey served to gain an understanding of perceptions teachers receive to support inclusion of children with ASD. The research questions are (1) What is the extent of the challenge for a central city - suburban school district for students with ASD who are bilingual in PPCD? (2) How well does the scope and sequence of the PPCD curriculum align with the Texas Prekindergarten Guidelines in a bilingual classroom? (3) How are prekindergarten teachers prepared to work with students with ASD who are bilingual? (4) What do teachers report about the quality of the professional development they have attended? **Method:** This study utilized a descriptive, exploratory design combined with a quantitative survey research method. The investigator analyzed (a) the extent of the challenge for students with ASD within a school district, (b) the 2015 Texas

Prekindergarten Guidelines and the scope and sequence for PPCD and bilingual prekindergarten to formulate curriculum maps, (c) the prekindergarten teacher professional development opportunities, and (d) the survey responses regarding perception of knowledge on inclusive topics for socialization and communication skills. The participants of the survey were 66 regular and bilingual prekindergarten teachers in a central city – suburban school district. Survey results were analyzed using Pearson chi-square and independent *t* tests. **Results:** The results of this study confirmed that within this central city – suburban school district, students entering public school systems who are labeled with ASD are steadily on the rise. Trends could not be determined for ELs with ASD within this particular school district. Evidence-based techniques for effective instructional practices must be added to professional development opportunities to support the rise of ELs with ASD. Teacher capacity appeared the highest with social development, when compared to communication and pedagogy. **Conclusion:** School districts across the US must shift paradigms and concretely train educators to support the academic, social, and communication needs of children with ASD within inclusion. Converging literature supports the maintenance of the home language among bilinguals with ASD; therefore, educational systems need to rise to the challenge of maintaining cultural and linguistic sensitivity equally for all students including those with disabilities.

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Chapter I

The increasing academic, language, and social demands for students in bilingual prekindergarten classrooms present challenges for the inclusion of students with autism spectrum disorders (ASD) in Preschool Programs for Children with Disabilities (PPCD) in public schools across the United States. Educators must focus on narrowing the social and communication gaps beginning with early childhood grade levels if students in special education are going to effectively be included in academic and social content courses in the upper grade levels. If students in special education cannot be effectively included in prekindergarten programs, then the educational system cannot assist them in transitioning to the least restrictive environment in higher grade levels. An element of interest to this study is aligning the scope and sequence of PPCD curriculum to the Texas Prekindergarten Guidelines within bilingual general education prekindergarten classrooms. Curriculum alignment is critical given that researchers found inclusive preschool placement more beneficial than mixed disability or autism-only school placements for children with severe social impairments and lower adaptive behavior (Nahmias, Kase, & Mandell, 2014).

Given that the diversity of the student population will continue to rise (Friend, 2008), it may be more feasible to support general education teachers with interventions such as co-teaching instead of adding specialized classrooms. Indeed, children with ASD have more opportunities to learn with typical peers in general education classrooms. Strain and Bovey (2011) cited findings that endorse the need for children with ASD to be with their typical peers and identified that further delays in communication and

socialization for children with ASD could be related to "socially nonresponsive, developmentally segregated settings in which they are most often educated" (p. 134).

The importance of this study is ultimately for bilingual students with ASD who enter special education via PPCD to spend as much time as possible in general education settings with typical peers in order to achieve generalization of skills. The students' educational context must be rigorous and academically aligned, with differentiated instruction being guided by highly qualified educators, i.e., educators who are trained in specialized evidence-based interventions to help students improve not only in academics but also in the areas of socialization and communication skills.

Statement of the Problem

The problem of practice for this study is the ability to structure all three components (i.e., fusion, integration, and teacher capacity) for a successful bilingual student with ASD to effectively participate in inclusive classrooms (see Figure 1). Fusion refers to the outlined objectives in the Texas Prekindergarten Guidelines, for which prekindergarten and PPCD scope and sequence should be aligned. Integration is the capacity of teachers to successfully include all children in general education settings. Furthermore, a review of teacher capacity will provide an in-depth analysis of the types of professional development training that general education teachers receive in order to support special education students with ASD during inclusion time.

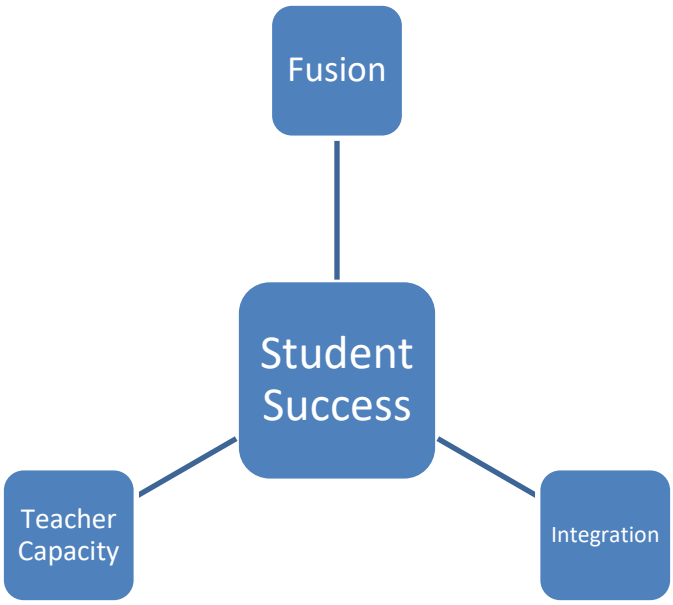

Figure 1. Problem of Practice.

Purpose of the Study

Research from the fields of early childhood education inclusion and instructional curriculum for children with ASD were reviewed for a comprehensive understanding of current practices of inclusion and for potential modifications that can be tailored to more appropriately accommodate bilingual students enrolled in PPCD.

Curriculum mapping. The significant contribution this study will add in the field of bilingual prekindergarten and special education is to inform administrators, special education teachers, and general education teachers on necessary vertical curriculum alignment for best inclusion practices beginning with the foundational grade of prekindergarten. The purpose of curriculum mapping for this study is to identify commonalities and gaps between the PPCD curriculum and bilingual prekindergarten guidelines after analysis of the prekindergarten scope and sequence. This will allow for greater clarity of the opportunities for students with ASD to join typical developing peers

during inclusion. One of the desired outcomes of effective inclusion with typically developing peers for students with ASD is for generalization of skills learned across educational environments. Justice, Logan, Lin, and Kaderavek (2014) proposed that the connection of peer effects within early childhood education settings is consistent with Bandura's social learning theory, "which posits that interactions with other people are an important mechanism for children's development" (p. 1727).

Professional development survey. In the third section of the Texas Prekindergarten Guidelines, Texas Education Agency (TEA, 2015) describes the role that general education teachers must serve in regard to the inclusion of students with special needs. The document cites that meaningful school participation includes the student's development of social–emotional skills, language/communication, and adaptive or self-help skills. The purpose of the survey developed for this study is to gain data on the level, if any, of the professional development training that general education teachers currently receive to support the needs of students with ASD.

Theoretical Framework

The research presented within this study will outline the strengths for inclusion and provide educators with strategies that ought to be integrated for best practices during bilingual general education opportunities. The theoretical principle for this research study is the concept of generalization. The principle of generalization was first posited by Skinner in 1938, which at that time included that, "when one operant (a behavior) is reinforced, there is an increase in the frequency of other behaviors without their being directly reinforced" (as cited in Stokes & Osnes, 1989, p. 338). Stokes and Osnes (1989) described the concept of generalization as training a behavior under a set of

circumstances and seeing an observable change in a similar scenario. The abovementioned seminal article can be interpreted to suggest that children with ASD must be given as many opportunities as early on as possible in their educational environments to demonstrate mastered academic, communication, and social skills, especially for maintenance to occur. The significance of the concept of generalization of skills for students with ASD will be examined and emphasized as a critical component for their educational programming. Desired outcomes for this study include (a) regularly scheduled, relevant professional staff development occurring within the particular school district being examined and encompassing topics such as curriculum alignment among general education and special education teachers and (b) increased use of evidence-based programs in inclusion opportunities that students with ASD already utilize in special education programming.

Significance of the Study

Given that research on early childhood inclusion has proved beneficial for typically developing peers and children with disabilities, the desired impact of the current study is for the state of Texas to commit to early childhood education by adding prekindergarten to Texas Essential Knowledge and Skills (TEKS). This would ensure statewide accountability and rigor across preschool programs in the state of Texas, which may be currently lacking with voluntary guidelines. Perhaps this commitment would refocus attention to the U.S. Department of Health and Human Services (USDHHS) and U.S. Department of Education (USDOE) policy statements, which could thereby drive policy changes to adopt national standards for early childhood education and rightfully define concepts such as inclusion for the equitable education of all students. The current

exploratory study intends to bring awareness to bilingual children with ASD in PPCD programs being included within general education bilingual prekindergarten programs with adequate curriculum alignment. This will ensure sufficient support for generalization of learned skills across environments for individuals with ASD who enter public schooling and are being raised in bilingual homes.

Legislation and Policy

Although special education was enacted during the 1800s, the practice of inclusion of special education students in general education settings, as we currently understand it, began to evolve in 1975 with the passage of the Education for All Handicapped Children Act, now known as Individuals with Disabilities Education Improvement Act (IDEIA). During the 1980s, a common practice was the provision of special education services as part of a pull-out model. However, there was a shift toward inclusion during the 1990s that has been steadily on the rise (Lombardi & Woodrum, 2000). According to USDOE data, from Fall 2000 to Fall 2015 across students ages 6 to 21 years there was a 16% increase in students who were special education eligible and spent more than 80% of the school day enrolled in general education settings. In the 2015–2016 school year, 13% of students ages 3 to 21 years who were enrolled in public schools received special education services (McFarland et al., 2018). Moreover, on the basis of 2015–2016 data from National Center for Education Statistics (NCES), autism was the fourth largest eligibility criteria with 9% of special education students ages 3 to 21 years who were labeled eligible under IDEIA, Part B (USDOE, NCES, 2018).

The effective inclusion of students with ASD is of paramount importance given the increased prevalence of ASD since the 1990s, with 1 in 150 births rising to 1 in 59

births during 2014 (Center for Disease Control and Prevention [CDC], Identified prevalence of ASD table). CDC's website describes ASD as "a developmental disability that can cause significant social, communication, and behavioral challenges" (What is autism spectrum disorder?, para. 1). In 2012 CDC data indicated 1 in 68 children in the United States was affected by ASD; however, as mentioned above, in 2014 that statistic increased to 1 in 59 children. The definition of ASD under IDEIA (2004) not only encompasses the parameters mentioned above by the CDC but also includes that ASD is typically evident before 3 years of age and that it must adversely affect the child's educational performance. The federal definition within IDEIA describes behaviors such as "engaging in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and usual responses to sensory experiences" (IDEIA, 2004, section 300.8).

Yell, Thomas, and Katsiyannis (2012) summarized that the purpose of IDEIA was to provide free and appropriate public education for students identified with a disability, "which consists of special education and related services that are designed to meet students' unique educational needs" (p. 73). In order to be eligible for services, the student must not only have an identified disability but also require specialized academic instruction due to their disability (Dragoo, 2017). The section within IDEIA (2004) mandating that students 3 to 5 years of age who are identified with a disability receive special education and related services within PPCD is of importance to this study. Section 614 of IDEIA includes a clause that stipulates special education students need to be educated along with their peers without disabilities to the greatest extent possible. This applies not only during academic instructional times but also during the participation of

extracurricular activities and other nonacademic times during the school day. Federal funds for IDEIA, Part B, services for the specific population of students 3 to 5 years of age are mandated in section 619. This particular section of IDEIA mandates that 3- to 5-year-old students who are identified with a disability receive special education and related services within PPCD. However, it is not a requirement for states to offer prekindergarten programs. For this reason, PPCD services are delivered across a variety of educational settings, (e.g., Head Start, private/public preschool programs, etc.; USDOE program description, para. 2). Additionally, section 300.304 stipulates that the content of a student's Individualized Education Program (IEP) needs to include "information related to enabling the child to be involved in and progress in the general education curriculum (or for a preschool child, to participate in appropriate activities)," (IDEIA, 300.304b).

The USDHHS and USDOE (2015) referenced that alternative placements as a first choice pose a conflict based on the least restrictive environment (LRE) interpretation within IDEIA (2004), in which the full extent of supplementary aids and services needs to be taken into consideration for integration of a student into a regular education setting. As a result of the lack of national definition of inclusion within IDEIA, the IEP is utilized to delineate the educational setting most appropriate for implementing each student's IEP.

National context. The Division for Early Childhood (DEC) and the National Association for the Education of Young Children Inclusion (NAEYC) claim in the 2009 *Early Childhood Inclusion* position statement that the absence of a national definition of inclusion has contributed to confusion and lack of shared understanding for all stakeholders (i.e., administrators, educators, parents, and advocates). These two entities

recognized that developing shared meaning for inclusion was essential "for determining what types of practices and supports are necessary to achieve high quality inclusion" (p. 1). Furthermore, in this position statement the following was posited as a broad definition of early childhood inclusion:

> embodies the values, policies, and practices that support the right of every infant and young child and his or her family, regardless of ability, to participate in a broad range of activities and context as full members of families, communities, and society (DEC & NAEYC, p. 2).

As indicated by USDHHS and USDOE (2015), over the past three decades the data revealed that the enrollment of preschool children with disabilities into general education programs has stayed relatively unchanged. According to USDOE (2018) statistics, during the 2007 school year 3- to 5-year-olds receiving IDEA, Part B, services were approximately 5.8% of the resident population, which increased to 6.4% (759,801 students) by 2016. Furthermore, for the same demographic in 2016, students with a label of autism were the third highest group comprising 10.1%. Students in a regular early childhood program for part of the school day totaled 66.8%, whereas, 39.9% of students received at least 10 hours of special education and related services delivered within a regular early childhood program. On the other hand, the second largest group, which comprised 22.7% of the students, were those who received services in a separate class.

A few other federal statutes have been enacted to protect individuals not covered under IDEIA services, such as section 504 of the Rehabilitation Act and the American with Disabilities Act (ADA). According to Dragoo (2017), "these two acts provide broad nondiscrimination protection not limited to education and have identical functional

definitions of disability rather than the categorical definition used in the IDEIA" (p. 3). Within Title II of the ADA, there is also the specification for the provision of the highest, most appropriate integration of individuals with disabilities by public entities such as public schooling systems (USDHHS & USDOE, 2015). Specifically, Title II of the ADA "prohibits discrimination by public entities, regardless of receipt of Federal funds, and protects children with disabilities from unlawful discrimination in early childhood programs, activities and services operated by state or local governments, including their early childhood programs" (USDHHS & USDOE, 2015, p. 5).

Furthermore, the 1965 Elementary and Secondary Education Act (ESEA) was amended in 2015 to the Every Students Succeeds Act (ESSA) and it "continues to build on the civil rights legacy of the original law by providing protections for our most vulnerable students and directing federal resources toward programs and strategies that help all students thrive" (USDOE, 2016, p. 4). Incorporated within ESSA are provisions for State Education Agencies (SEAs) and Local Education Agencies (LEAs) which serve as guidance for elements that must comprise a high-quality preschool program. These nationally accepted elements include (a) highly qualified teachers with specialized degrees in early childhood education, (b) professional development that is on-going and also includes components of mentoring and coaching in early childhood development, (c) low student-to-teacher ratio, (d) programs that are full-day and year-round, (e) inclusion of children with disabilities, (f) support for students with individualized accommodations, and (g) continuous improvement via constant program (USDOE, 2016). Title I, Part A, includes guidance for LEAs to offer free, public preschool programs for children up to the age of elementary school for the improvement of educational results. The purpose

stated within ESSA for Title I preschool programs is “to assist children most at risk of failing to meet the State’s challenging academic standards based on multiple, educationally related, objective criteria” (USDOE, 2016, p. 9). Funding for special populations is delineated within ESSA, which include children in foster care, children who are homeless, children from migrant families, and children who are English Learners (ELs), among other groups. Of importance to this study is the research cited within the USDOE (2016) document, as “longitudinal studies have also shown that ELs who participate in early learning programs achieved English language proficiency sooner than their peers who did not participate in such programs” (p. 14). Title III of ESSA specifies that SEAs and LEAs may use additional funds for professional development for early childhood educators in order to provide effective language instruction within their preschool programs for ELs.

ELs who are enrolled in U.S. public schools are a secondary population for consideration within this study. McFarland et al. (2018) cited that 9.5% of students enrolled in Fall 2015 were considered ELs. Moreover, 14.7% of the total EL population enrolled in public elementary and secondary schools were identified as students with disabilities during that same year. Given that bilingual prekindergarten guidelines for implementation with Spanish-speaking classrooms are being examined, it was of importance that 77.1% of all EL students (estimated 3.7 million) reported Spanish as their home language during the same period. In a USHHS and USDOE (2017) policy statement for the support of dual language learners in early childhood settings, preparedness was urged of early childhood programs “to optimize the early experiences of these young children by holding high expectations, capitalizing on their strengths-

including cultural and linguistic strengths- and providing them with the individualized developmental and learning supports necessary to succeed in school" (p. 1).

Specialized protocols/methodologies such as Learning Experiences and Alternative Program for Preschoolers and Their Parents (LEAP) and Treatment and Education of Autistic and Related Communication Handicapped Children (TEACCH) have only in recent years been proven as efficacious for children with ASD within public schools in the United States (Strain & Bovey, 2011; D'Elia et al., 2014). Exploratory international studies have been conducted in countries such as Italy, China, and Canada to name a few that have found similar benefits, despite cultural and language differences, with at least TEACCH programming. Current research lacks breadth for the evidence base for the EL population who meet educational eligibility under the label of Autism in the United States. Converging research has been evident in the efficacious outcomes for the communication and socialization skills of students with ASD and also that of typically developing peers during inclusion opportunities in preschool (Rafferty, Piscitelli, & Boettcher, 2003; Nahmias et al., 2014; Radley, Hanglein, & Arak, 2016; Locke, Rotheram-Fuller, & Kasari, 2012). The current study can be utilized as a platform to merge the social and communication benefits of inclusion for bilingual children with ASD, ideally in tandem with LEAP and TEACCH methodology during regular education instruction with adequate support. The rise in both the prevalence of ASD and the growth of the EL population ought to bring proportional focus to equitable opportunities for the development of students' highest potential.

State context. In the state of Texas prekindergarten attendance is not mandatory for children, nor has the state implemented Texas Essential Knowledge and Skills

(TEKS) for this grade level. Instead, the Commissioner of Education approved the Texas Prekindergarten Guidelines (TEA, 2015). This document states that the use of such guidelines is voluntary for implementation by school districts across Texas. A lack of state-mandated curriculum for prekindergarten has aided in the continued enrollment of bilingual students with ASD into alternative placements other than inclusion into bilingual mainstream classrooms. This is challenging given that LRE is defined within IDEIA (2004), specifying that children with disabilities have the right to receive education with typical peers and that

> special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily (34 CFR 300.114-300.120).

TEA is in charge of implementing Part B services of IDEIA (2004) in which free appropriate public education (FAPE) are to be considered accessible to all children with disabilities ranging from 3 to 21 years of age (Department of Assistive and Rehabilitative Services [DARS] & Texas Education Agency [TEA], 2014). This may be a transitional process for the family of a child who received IDEIA (2004) Part C services, otherwise known as Early Childhood Intervention (ECI). Consideration for eligibility of Part B services is completed via a Full and Individual Evaluation (FIE) before the child's third birthday or 60 days after receiving the request from the parent/guardian. Two eligibility criteria that are exceptions to the aforementioned are children with visual impairments (VI) and children with auditory impairments (AI), who receive a combination of services

from ECI and their LEA from birth instead of starting at the age of 36 months (DARS & TEA, 2014). After testing is completed, an Admission, Review, and Dismissal (ARD) committee meets to discuss findings and impressions collected during the FIE and determine if an IEP will be drafted. At that time, instructional placement or LRE for implementation of the IEP is discussed by the ARD committee (IDEIA, 2004) for the preschool student. A student with a disability can be found eligible in one or more of 14 eligibility categories (IDEIA, 2004). Primary eligibility criteria of interest to this study include (a) autism, (b) developmental delay, (c) multiple disabilities, and (d) speech or language impairment. PPCD services begin after the child's third birthday and once the parents/guardians have accepted the services proposed during the ARD meeting; however, parents also have the right to deny FAPE. According to the TEA website, "eligible children may receive PPCD services in a variety of settings such as pre-kindergarten, resource, and self-contained classrooms or in community settings such as Head Start and pre-school" (Services for Texas students with disabilities ages 3–5, para. 1). If SEAs such as TEA do not comply with federal mandates, the risk includes not only loss of funding for school districts, but also due process hearings initiated by families of students receiving inadequate special education services.

Prekindergarten in the state of Texas is not mandatory; however, according to the Texas Education Code (TEC), Chapter 25.085, compulsory attendance laws apply to prekindergarten students who are voluntarily enrolled. A child is eligible for prekindergarten attendance if he or she is 4-years-old before September 1 of the current academic year and meets one of the following criteria: (a) is unable to understand or speak English, (b) is educationally disadvantaged and needs to participate in national free

or reduced-price lunch, (c) is homeless, (d) is a dependent of an active duty member of the armed forces of the United States, (e) is a dependent of an active duty member of the armed forces of the United States who is injured or killed in action while on active duty, (f) is currently in or has been under the care of the Department of Family and Protective Services following an adversary hearing, or (g) is the child of a person eligible for the Star of Texas Award as a peace officer, firefighter, or emergency medical first responder (TEA, Eligibility for Prekindergarten, para. 1–2). On the other hand, children who are eligible for special education services under IDEIA (2004) are not automatically eligible for prekindergarten enrollment. According to the TEA,

> the only time a prekindergarten student is eligible for a full day of Average Daily Attendance is if the student attends the prekindergarten program for half and PPCD for the other half of the day. The student must meet the qualifications of both programs to be coded eligible full-day (ADA eligibility code 1; TEA website, Prekindergarten Eligibility and Attendance, para. 7).

An exception to this clause is when an ARD committee agrees that a child with a disability, who is not eligible under the above-stated guideline, would benefit from prekindergarten participation as part of the student's IEP.

TEKS, curriculum state-based standards, are implemented for grades kindergarten through 12th grade. Currently, there are no TEKS or state-mandated curriculum for the grade of prekindergarten. Instead, in Fall 2015 a TEA committee revised the prekindergarten guidelines. The Texas Prekindergarten Guidelines, as stated by TEA (2015), "delineate the behaviors and skills that children are to exhibit and achieve, as well as instructional strategies for teachers.…the guidelines provide a means to align

prekindergarten programs with the Texas Essential Knowledge and Skills (TEKS)" (Prekindergarten Guidelines, p. 1). The document states that the use of the prekindergarten guidelines is voluntary due to a lack of state-required curriculum. Within the Texas Education Code, Subchapter E, beginning in section 29.151, kindergarten and prekindergarten programs rules are delineated for further reference. The prekindergarten program in the state of Texas is funded from the Foundation School Program (FSP), and eligible half-day students generate Average Daily Attendance (ADA). For full attendance accounting requirements, the Student Attendance Accounting Handbook (SAAH) can be reviewed via the TEA website.

According to the Texas Public Education Information Resource (TPEIR), Texas education reports show that the total prekindergarten population in the State of Texas during the 2016–2017 school year was 224,114 students ages 3 and 4 years old. Of those prekindergarten students, 191,252 (85%) were economically disadvantaged, 88,567 (40%) were ELs, 9,082 (4%) were enrolled in special education, 6,780 (3%) were military children, 5,531 (2%) were homeless, and 1,763 (0.8%) were in foster care. The median class size for 2016–2017 was 19 prekindergarten students of combined ages. The student to teacher ratio for that same year was 21:1. If instructional aids are included this ratio was 18:1. Figure 2 illustrates a comparison based on student status:

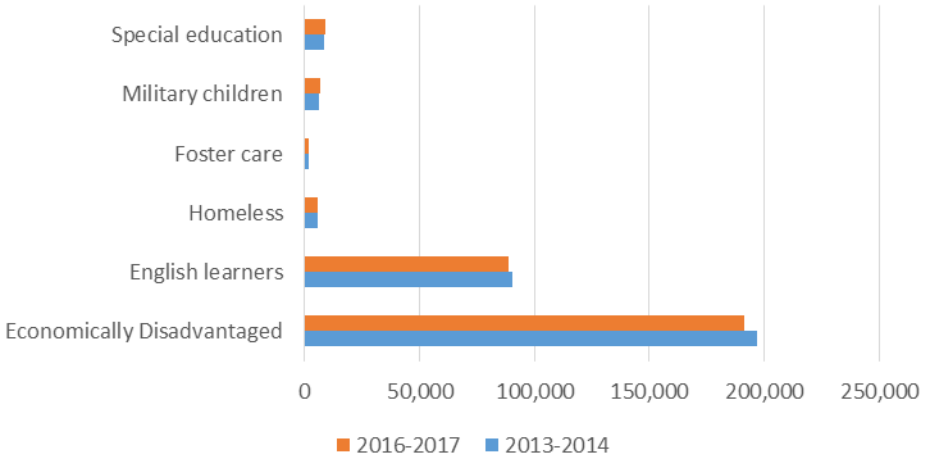

Figure 2. TPEIR prekindergarten student status comparison data.

Figure 3 illustrates ethnic demographic for prekindergarten students enrolled in Texas:

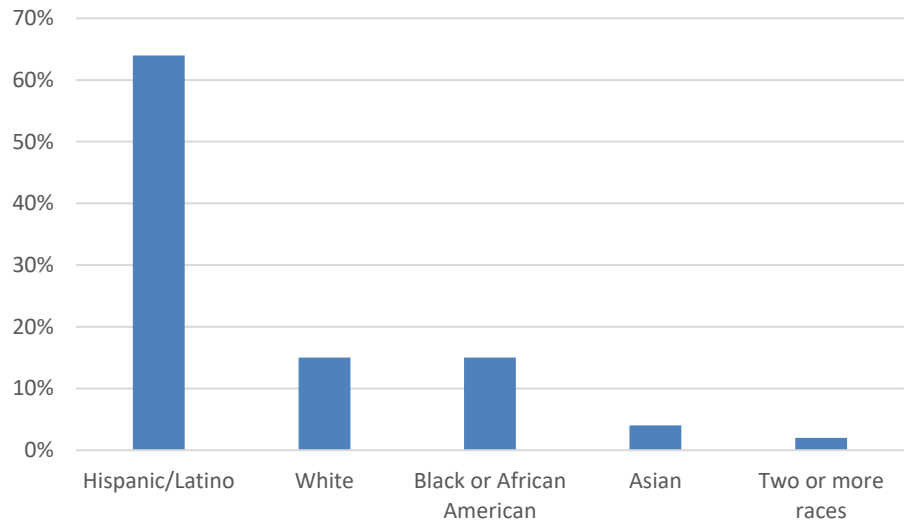

Figure 3. TPEIR 2016–2017 prekindergarten ethnic distribution data.

According to data found on the TEA website, the Commissioner of Education has approved the following prekindergarten assessment instruments for monitoring of the Texas Prekindergarten Guidelines: CIRCLE Progress Monitoring, Developmental Indicators for the Assessment of Learning, Fourth Edition (DIAL-4), Work Sampling

System, Ready, Set, K!, GOLD, Frog Street Assessments, Learning Accomplishment Profile-3 (LAP-3), Behavioral and Emotional Screening System (BASC-3 BESS), and Istation's Indicators of Progress, Early Reading (ISIP-ER). Furthermore, Figure 4 illustrates report data for top curricula.

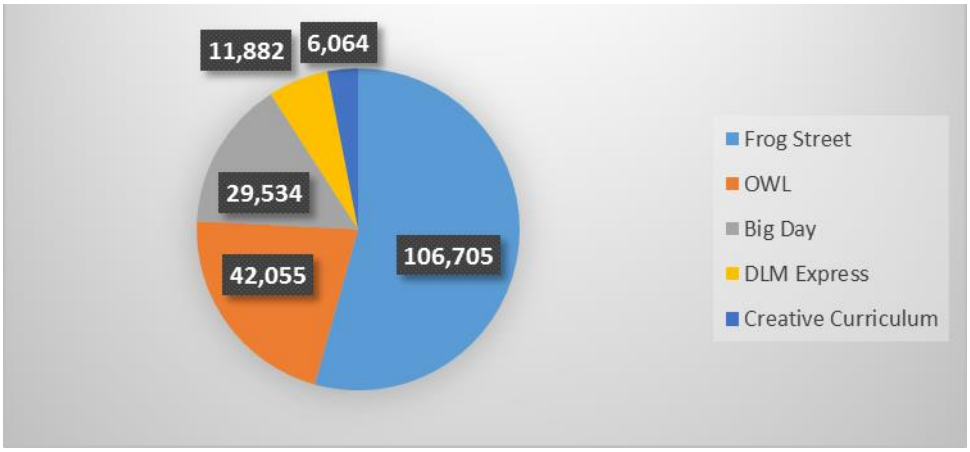

Figure 4. TPEIR 2016–2017 top 5 curricula for prekindergarten students.

Local context. The school district utilized for this study, similar to many others in the greater metropolitan Houston, Texas area, has opted to add programs (e.g., special prekindergarten classrooms, Learning Experiences and Alternative Program for Preschoolers and Their Parents classrooms (LEAP), etc.) due to the difficulty of full inclusion of PPCD students into general education prekindergarten classrooms. Specifically, this study focused on data from a central city – suburban public school district in the greater Houston metropolitan area of approximately 56,000 students. The 2016–2017 Texas Academic Performance Report (TAPR) data shows that out of the 5,269 students with disabilities within the district utilized for this study, 19.1% were identified with ASD and 1.0% were labeled as students with non-categorical early childhood. The TPEIR Prekindergarten District data download from 2016–2017 indicated total enrollment for that school year was 2,368 prekindergarten students. The

two subpopulations of relevance were 1,202 students who were considered ELs and 83 students who received special education services during the same school year. Specific numbers for the students with ASD were not available for this school year.

Research Questions

The following questions were addressed in the current study:

Research Question 1: What is the extent of the challenge for a central city - suburban school district for students with ASD who are bilingual in PPCD?

Research Question 2: How well does the scope and sequence of the PPCD curriculum align with the Texas Prekindergarten Guidelines in a bilingual classroom?

Research Question 3: How are prekindergarten teachers prepared to work with students with ASD who are bilingual?

Research Question 4: What do teachers report about the quality of the professional development they have attended?

Chapter II

Review of Literature

The U.S. Department of Health and Human Services and U.S. Department of Education (USDHHS & USDOE, 2015) revealed from data collected over the past three decades that the enrollment of preschool children with disabilities into general education programs has remained relatively unchanged. Citing USDOE data spanning from 1985 to 2012, Barton and Smith (2015) indicated only a 5.7% increase in the number of preschool children with disabilities participating in general education early childhood settings. Moreover, data from 2013 indicated that 54% of preschool children with disabilities were being educated and receiving special education services in educational placements separate from their typically developing peers. The data mentioned above is concerning especially when the USDHHS and USDOE (2015) joint-position statement states that "all young children with disabilities should have access to inclusive high-quality early childhood programs, where they are provided with individualized and appropriate support in meeting high expectations" (p. 1).

Two populations of the U.S. educational system that are steadily on the rise are bilinguals and children with autism spectrum disorder (ASD). McFarland et al. (2018) cited that 9.5% of students enrolled in fall 2015 were considered English learners (ELs). Moreover, 14.7% of the total EL population enrolled in public elementary and secondary schools were identified as students with disabilities during that same year. Similarly, USDOE for 2015–2016 revealed that 9% of students ages 3 to 21 years who were receiving services under the Individuals with Disabilities Education Improvement Act (IDEIA), Part B, have eligibility as students with ASD (NCES, Children and Youth with

Disabilities, 2018). For a broader perspective of the prevalence of ASD, data from the Center for Disease Control and Prevention (CDC) was also referenced via the official website. In 2012, CDC data indicated that 1 in 68 children in the United States was affected by ASD; however, in 2014 those estimates increased to 1 in 59 children (CDC Basics about ASD, para. 1).

The theory of crosslinguistic transfer in bilinguals has been well accepted for at least the last three decades and is the foundation for bilingual education programs in the United States. It is only recently that researchers have begun studying bilingualism and how the language acquisition of children with ASD is impacted (Reetzke, Zou, Sheng, & Katsos, 2015; Valicenti-McDermott et al., 2012; Ohashi et al., 2012; Hambly & Fombonne, 2012). Researchers have concluded that exposing children with ASD to bilingual environments does not exacerbate language delays any more than in monolingual counterparts with ASD (Hambly & Fombonne, 2012; Ohashi et al., 2012; Reetzke et al., 2015). In fact, researchers posited that children with ASD accomplish language achievements similarly whether in monolingual or bilingual environments (Hambly & Fombonne, 2012). Historically, administrators and educators provided bilingual families of children with disabilities recommendations such as English-only instruction to avoid language confusion resulting from delays (Yu, 2013). Furthermore, parents were advised to speak English at home despite it not being the home language. Perhaps owing to the rapid rise of this population and lack of evidence-based support for bilingualism, professionals working with these students have provided families misguided information regarding exposure to two languages.

The research community seems to agree on the efficacious outcomes for communication and socialization skills of students with ASD, as well as for those of typically developing peers, during inclusion opportunities in preschool (Rafferty et al., 2003; Nahmiaset al., 2014; Radley et al., 2016; Lockeet al., 2012). Though the trend of inclusion for school-aged students has gained acceptance over the last two decades, the statistics are not equitable for preschoolers. Research lacks breadth for evidence base of specialized protocols/methodology (e.g., Learning Experiences and Alternative Program for Preschoolers and Their Parents [LEAP], Treatment and Education of Autistic and related Communication Handicapped Children [TEACCH], etc.) within the EL population that is eligible under the criteria of ASD. Within the United States, limited research has been conducted analyzing the inclusion of children with ASD into general education bilingual prekindergarten classrooms.

Variables and Main Components

One of the dependent variables of interest to this study is the alignment of curriculum between the Texas Prekindergarten Guidelines within the bilingual program and the scope and sequence of Preschool Program with Disabilities (PPCD) for a central city - suburban school district in the greater metropolitan Houston area. A recurring topic within Every Student Succeeds Act (ESSA) as cited by USDOE (2016) is the non-regulatory guidance for early childhood educators of horizontal and vertical curriculum alignment. It was mentioned that “the law stresses greater coordination, at both the State and local levels, of programs that serve young children, and encourages a more seamless learning experience from preschool through the elementary grades” (USDOE, 2016, p. 16). Horizontal alignment is defined by USDOE (2016) as uniformity of professional

and program standards within a particular grade for an age group. On the other hand, vertical alignment is defined by the same entity as the progressive continuum of standards from birth through upper grade levels for the development of satisfactory knowledge. Furthermore, the independent variables corresponding with the curriculum alignment are the Texas Prekindergarten Guidelines implemented within a bilingual classroom and the Preschool Program with Disabilities (PPCD) scope and sequence. The Texas Prekindergarten Guidelines were approved by the Commissioner of Education in 2015 and contain precursory developmental skills necessary for students to master prior to starting on kindergarten Texas Essential Knowledge and Skills (TEKS; TEA, Texas PK Guidelines, para. 1). According to the PPCD content specialist of the school district utilized for this study, PPCD teachers are utilizing the scope and sequence for the district's prekindergarten program. General and special education teachers have district access to review the scope and sequence on a daily basis, along with lesson plans for some of the critical objectives. The connection among these variables and the overall purpose of this study is to describe the commonalities and gaps between PPCD curriculum and bilingual prekindergarten scope and sequence via the use of the intervention of curriculum mapping.

Moreover, this study is also concerned with a second dependent variable, which is the general education teacher's knowledge regarding inclusive practices to assist in the development of social and communication skills across educational environments for children with ASD. Friend, Cooke, Hurley-Chamberlain, and Shamberger (2010) proposed that the solution may be in co-teaching for the increased collaboration among general and special education teachers and utilization of evidence-based practices. The

researchers referenced that interest in co-teaching has been growing since No Child Left Behind Act of 2001 was enacted, which stated that general education curriculum must be accessed by all students, even those with identified disabilities; likewise, interest was further bolstered by the re-authorization of IDEIA in 2004. According to informal surveying methods of several prekindergarten teachers, the school district utilized for this study offered district-wide training for general educators several years ago for a few hours. There did not seem to be a consensus of ongoing scheduled professional development or training around topics of inclusion or co-teaching practices. For this reason, a Likert scale survey was formulated that will yield prekindergarten general education teacher responses and serves as an independent variable of this study. The connection among these variables for Question 2 is that the research presented within this study will delineate the strengths for inclusion and provide educators with strategies for best practices during bilingual general education opportunities. The theoretical principle for this research study is the concept of generalization. Stokes and Osnes (1989) explained the concept of generalization as follows: "If training or a program of intervention occurred in the presence of one set of circumstances (stimulus class), that training may have an effect on responding in the presence of similar stimuli" (p. 338). The significance of the concept of generalization of skills for students with ASD will be examined and emphasized as a critical component for their educational programming. Desired outcomes as a result of this study include (a) consistent professional staff development within the study's targeted school district that encompasses topics such as curriculum alignment, inclusion, and co-teaching among general/special education teachers and (b) increased use of special education's evidence-based programs (e.g.,

LEAP and TEACCH) within inclusion opportunities for students with ASD, so as to improve their accessibility to general education curriculum.

Scope and sequence. Marlow (1990) defined scope as the breadth of the curriculum and sequence as the timeline in which the content will be taught. The scope of a curriculum can be either determined by the authors of the selected textbooks or by the programmers of the specific curriculum adopted (e.g., Scholastic Early Childhood Program, etc.). Beyer (1988) suggested the sequence of skills in a curriculum should be arranged by educators "in the order in which they are to be introduced, practiced, generalized, and elaborated" (p. 26). Additionally, this researcher postulated that instead of the subject matter at the center of scope and sequence, of greater consideration should be the thinking processes for the acquisition of learning new material.

Three skills that can be applied across subjects as a driving force for scope and sequence were identified by Beyer (1988) as thinking strategies, critical thinking, and information processing skills. Thinking strategies are comprised of problem-solving, decision-making, and conceptualization. The second level of operations in the area of critical thinking is used to analyze and evaluate the accuracy and value of the content. It is within the third level, during the acquisition of information processing skills, that the learner recalls, interprets, synthesizes, evaluates, and reasons for the content.

Generating scope and sequence with a developmental framework impacts the learner in that foundational skills must be conceptualized and delivered in a hierarchical manner in order for higher order skills to be mastered and generalized across subjects. Scope and sequence is a starting point for the process of curriculum mapping, in that the skills, content, and time frames are delineated, and the educator maps assessment for the

evaluation of the rigorous implementation of the curriculum. Assessment of the instruction assists educators in identifying the gaps, strengths, and redundancies and objectively modifying lesson plans to meet the student's individual needs (Jacobs, 1997).

Curriculum mapping. Curriculum mapping was posited by Jacobs (1997) as being comprised of seven phases: the collection of data, first read-through, mixed group review session, large group review session, determination of points for immediate revision, determination of points requiring long-term research and development, and continuation of review cycle. During Phase 1, educators must complete a calendar-based map to serve as a reference for when classroom curriculum will be instructed. Additionally, during this phase, educators must identify the processes and skills that require emphasis, essential content in reference to concepts/topics, and assessment tools for a measure of performance. In Phase 2, teachers serve as the editors of the maps and are responsible for identification of repeated content, gaps, meaningful assessments, alignment with state standards, possible areas of integration, and timeliness to include best teaching practices. At this stage, it is not the responsibility of the teacher to rewrite but only to identify areas of the curriculum that need further discussion. Phase 3 is the first opportunity during which the staff discusses the maps in a mixed group. The author referred to the optimal size of the group as between six and eight teachers in order to create a sheet listing of the outcomes discussed by each member of the group. During this phase, rewriting of curriculum is still not taking place, instead this phase serves as a "reporting-out" procedure instead of a "decision-making" procedure.

Phase 4 is the stage when the entire staff reviews the findings and outcomes from the sheet listing, begins the discussion of developing patterns, and continues the

compilation of data without judgment. During this stage, the staff decides if the group is too large for the editing process to begin and if it is optimal to return to designated instructional teams. It is during Phase 5 that actual revision of the overt redundancies in the curriculum maps begins, and negotiation takes place among staff members of exactly what grade level and content area will continue with this skill. Phase 6 requires long-term planning, as well as finding solutions for immediate problems within the curriculum. It requires that staff implements professional learning communities for further exploration and solutions for areas that are in need of major revision, which will require focused lengthy discussions. Finally, Phase 7 is the continuous process of reviewing the relevance of the curriculum and vertically/horizontally aligning instructional practices.

Curriculum alignment is essential to narrowing achievement gaps at an earlier age for students enrolled in PPCD. This can be achieved by comparing curriculum maps so that administrators can better grasp the cross-training that regular and special education teachers require. It is not sufficient for para-educators to be sent to general education inclusion time with these students enrolled in PPCD, but instead educators must appropriately and effectively deliver evidence-based teaching protocols for these young students who need the most intensive instructional attention to narrow achievement gaps.

Inclusion. Inclusion was defined by Rafferty et al. (2003) as the placement of students with an identified disability in educational programs with typically developing peers with the proper and required supports for equitable opportunities. The Division for Early Childhood (DEC) and the National Association for the Education of Young Children (NAEYC) in a joint position statement suggested that “the most far-reaching effect of federal legislation on inclusion enacted over the past three decades has been to

fundamentally change the way in which early childhood services ideally can be organized and delivered" (DEC & NAEYC, 2009, p. 1). Six recommendations for federal, state, and local stakeholders were proposed within the position statement for the improvement of early childhood services: (a) high expectations for full development of potential should be expected for every child, (b) inclusion should be a program value, (c) support systems must be in place for various services, (d) programs should be revised and professional standards revisited, (e) professional development should be an integrated system, and (f) focus should be on influence at the federal and state levels for meaningful change to define inclusion at the national level. The USDHHS and USDOE (2015) within their policy statement quantified the reality for preschoolers that "many children are referred to separate settings, such as special education preschool classrooms, as a first resort. This may be especially true for children with more significant disabilities, despite evidence that inclusion is beneficial to children across ability levels" (p. 6).

ASD and curriculum. The effective inclusion of students with ASD is of paramount importance given that since the 1990s ASD incidence in the United States has increased from 1 in 150 births to 1 in 59 births during 2014 (CDC, Identified prevalence of ASD table). The Center for Disease Control and Prevention (CDC) website describes ASD as "a developmental disability that can cause significant social, communication, and behavioral challenges" (Basics about ASD, para. 1). As mentioned in Chapter I, there was a 15% increase in the incidence of ASD over a two-year span. Given this increase, stakeholders must explore evidence-based practices for preschoolers and expand appropriate uses within the EL population across public schools in the US.

A review of the literature of preschool curriculum implemented with children with ASD revealed a significantly restricted number of evidence-based protocols available for public school classrooms. One trend in the research for specialized ASD curriculum is implementation of protocols/strategies primarily in special education settings, not purely as an accommodation within general education placement. The research referenced LEAPTEACCH as the only two programs with positive treatment outcomes that are adequate for implementation within classrooms. The other three conceptual frameworks, discrete trial training (DTT), developmental capacities; individual processing differences; relationship-based intervention (DIR) floor time, and Applied Behavior Analysis (ABA) were described as best implemented individually either in clinically center-based programs or home environments (Erba, 2000). While these three conceptual frameworks are widely accepted, a review of these programs was not completed as they are not of relevance to this study. The program specialist for the central city – suburban school district referenced within this study stated that LEAP classrooms are an instructional placement possible for preschool children with ASD. Furthermore, PPCD classes within the district utilize some concepts of Structured Teaching from the TEACCH principles for the implementation of Individualized Education Program (IEP) goals/objectives and curriculum. A summary of both of these programs has been included in this.

Numerous authors support the claim that LEAP and TEACCH protocols are efficacious in the areas of communication, adaptive behavior, and socialization, among other skills for students with ASD. Most of the studies referenced in this section of the literature were conducted overseas despite TEACCH and LEAP protocols having a

history of being developed in the United States. The school district on which this study is based implements both of these programs/strategies across several campuses within PPCD and LEAP classrooms in order to provide evidence-based interventions for students with ASD. After analysis of the literature and the results of this study, perhaps consideration by school district program specialists and administrators of the implementation of TEAACH and LEAP strategies will begin to shift to being embedded within general education programming instead of the current delivery model within PPCD and LEAP classrooms. Panerai et al. (2009) suggested that "structured teaching does not define where people with autism should be educated, therefore TEACCH program might be a tool to help in inclusion" (p. 875).

Bilingual education and best practices. The IEP is the driving force for a special education student's programming. IDEIA (2004) section 300.304 includes a clause that states that assessments and evaluations are "administered in the child's native language or other mode of communication and in the form most likely to yield accuracy information on what the child knows and can do academically, developmentally, and functionally" (IDEIA Evaluation procedures, subsection c). It is a federal law to practice cultural and linguistic sensitivity for eligibility determination. Therefore, local education agencies (LEA) should also consider prekindergarten-placement options into bilingual programs for IEP implementation for PPCD students.

According to TEA website content, the State Board of Education (SBOE) is responsible for the adoption and revision of the TEKS by subject area. TEKS begins in kindergarten and is accessible for every grade level through 12th grade across content areas. The grade of prekindergarten does not align with TEKS, and for this reason,

prekindergarten guidelines were approved by the Commissioner of Education for voluntary use. The Texas Administrative Code (TAC), Chapter 128, was referenced by the TEA website for a review of the TEKS for Spanish language arts and English as a Second Language, which became effective November 26, 2008. Within the introduction of TEKS, section 128.11, there was no differentiation between providing language arts to students in Spanish with special needs versus those in regular education. TEKS, Chapter 128, cites evidence-based studies regarding facilitation of English language learning via the instruction in the student's home language. Additionally, the underlying theory of *transfer* is also regarded as important within this TEKS chapter in the ability of a student to learn Spanish and apply those solid principles to English. Furthermore, the cross-transfer between English and Spanish is rationalized in this section as the bilingual education model for Texas schools.

The literature suggests that principles for the effective inclusion of ELs and for students with disabilities share commonalities due to the increased processing time for learning vocabulary and concepts for both populations (Santi & Francis, 2013). Moreover, similarities in the processes by which ELs and native speakers acquire literacy skills when learning to read an alphabetic language have been identified. Three best teaching practices posited by the researchers were to (a) take the focus away from materials and concentrate instructional activities, (b) create pairs based on ability grouping during peer-assisted learning activities, and (c) monitor progress via data gathered from assessments for continuous adaptation of instructional practices (Santi & Francis, 2013).

Focusing on instructional activities assists the educator in anticipating concepts which may be the most challenging for students to grasp. Additionally, chunking instructional time to engage students during shorter periods can be beneficial for maximizing student learning/outcomes. Once the educator presents new material, ample opportunity should be provided for modeling, visualization, and discussion among students before the educator completes a comprehension check. Peer-assisted learning principle has been previously established as beneficial for all students regardless of academic ability. According to Santi and Francis (2013), "time spent engaged in reading and discussion of the content provides at-risk children with multiple opportunities and ample time to process, learn, and organize material in a way that matches their needs" (p. 133). Peer-assisted learning is well structured and intentionally planned throughout the week with greater time allotted to at-risk pairs, along with teacher progress monitoring being regularly scheduled. Meaningful and brief activities must be planned for prior assessment of knowledge, which the educator must first consider when beginning each lesson. During actual instruction, the educator must assess the appropriateness of the segment of teaching time by conducting comprehension checks. Finally, to close the lesson the educator must assess student learning and concepts/vocabulary that need to be reinforced during subsequent lessons. In order for ELs to achieve satisfactory academic outcomes, it is of importance for LEAs to support development and time for development of best teaching practices via collaboration and co-teaching strategies among general and special education teachers beginning with the foundational grade of prekindergarten.

One resource that LEAs can utilize for the professional growth of staff is *Practical Guidelines for the Education of English Language Learners: Research-Based*

Recommendations for Instruction and Academic Interventions (Francis, Rivera, Lesaux, Kieffer, & Rivera 2006). In that document the authors posited six recommendations to guide the academic instruction of ELs in the area of reading, two of which will be discussed due to the relevance for preschool-age students. The first recommendation of providing "early, explicit, and intensive instruction in phonological awareness and phonics in order to build decoding skills" (p. 30) can begin to be incorporated into the PPCD curriculum and reinforced during regular education inclusion time. Well accepted research in the field of literacy has identified students as early as the kindergarten grade level experiencing difficulty in later elementary grades that had a history of difficulty with phonological awareness skills early on. Additionally, support for bilingual education and exposure within this program for PPCD students can be supported in the finding that a child's native-language phonological skills are positively correlated to the child's acquisition of English phonological awareness and phonics. Francis et al. (2006) suggested that ELs, "even in the very beginning stages of English language development, benefit from phonological awareness instruction and activities" (p. 18). The researchers explained that the "wait and see" method for intervening in this area of reading is not advisable due to continued difficulties with comprehension of the language structure, despite students demonstrating increased English proficiency later.

Once the foundation for strong phonological awareness is built, then it is suggested that the educator determine if a large group or small group instruction is warranted for reading acquisition. As educators implement interventions with students such as the population in this study, i.e., preschoolers, there must be careful alignment among an area of weakness and targeted intervention (Francis et al., 2006). The time of

day the intervention is being implemented, as well as the instructional setting (e.g., small group vs. large group instruction) should also be considered.

The second recommendation provided by Francis et al. (2006) is for educators to grow a robust lexicon via increased opportunities within academic contexts that are relevant for ELs. Research has historically cited that only approximately 5–10% of instructional time is for vocabulary development within classrooms, which is especially challenging for ELs. Often ELs may know the label for a concept, but, they may lack an understanding of semantic relationships or "deep conceptual knowledge" (p. 20). This lack of conceptual knowledge hinders academic success in preventing adequate vocabulary and foundational skills for the development for prior knowledge retrieval in the future. Educators quite often emphasize vocabulary relevant within lessons and less frequently function words relevant across contexts (e.g., constitute, acquire, etc.). Researchers emphasized that "vocabulary instruction must be frequent, intensive, systematic, and complex" (p. 21). This vocabulary instruction must be focused on academic language, be built on the conceptual framework of the word, be associated semantically to the word class, and be presented in reference to a variety of word knowledge such as multiple meanings. Educators need to provide opportunities across modalities and empower students to access word meanings independently. Careful consideration for developing a robust lexicon among ELs, "requires striking a balance between explicit teaching of individual words and teaching word-learning strategies" (p. 21). Researchers suggested that vocabulary expansion must occur not only during language arts block but instead across well selected academic contexts across all subjects.

Accommodations during bilingual instructional time will increase student outcomes via appropriately planned activities, such as those outlined above. Furthermore, provision of evidence-based strategies within general education bilingual settings for all students who require it, regardless of disability criteria, is of importance due to the consistently growing trends for the demographics of ELs within public schools in the United States. The U.S. Department of Education reported that in Fall 2015 there was an increase to 9.5% (4.8 million) students who are considered ELs, which rose from 8.1% (3.8 million) students in Fall 2000. Furthermore, enrollment specific to ELs indicated that approximately 713,000 students who were ELs were identified with a disability in Fall 2015. The 713,000 students referenced above comprise 14.7% of the total enrollment of ELs in elementary and secondary public schools in the United States. Specifically during the 2015–2016 school year, in the state of Texas 16.8% of the student population enrolled in public schools were considered ELs (NCES, English language learners in public schools, 2016).

Relevant Literature: Inclusion Research

One trend in the research is advocacy for inclusion of special education students beginning with the foundational grade of prekindergarten for improved student outcomes. The National Early Literacy Panel (NELP, 2008) recognized foundational skills taught in prekindergarten such as alphabetic principle, phonological awareness, print concepts, and oral language skills as essential for improved student outcomes in later grade levels. Green, Terry, and Gallagher (2014) cited that children with language impairments are more likely to exhibit difficulties in acquiring literacy skills. It was posited by the researchers that it is critical for later academic achievement that preschoolers receive

quality literacy instruction, with this being of greater importance to students with developmental delays who enter preschool behind typically developing peers. Prekindergarten students who were typically developing and also those identified with disabilities were administered the Phonological Assessment Literacy Screening Prekindergarten (PALS-PreK) and the Peabody Picture Vocabulary Test, Third Edition (PPVT-3), in the fall and spring of an academic year as dependent variables in their study. Findings revealed significant emergent literacy progress for both groups, typically developing and preschool children with a variety of disabilities, who were enrolled in an Early Reading First classroom. It is important to note that students with disabilities did not get equal scores on any language or reading tasks when compared to typically developing peers. However, this group evidenced gains in orthographic skills and receptive vocabulary. Further results of this study indicated that explicit, small-group phonological-awareness instruction for students with disabilities assisted in narrowing the achievement gap instead of addressing these skills during large-group instructional time (Green, Terry, & Gallagher, 2014). This article is important and relevant to the current study because it supports inclusion in language-rich classrooms via progress on orthographic skills; however, it advocates for small group instruction for some less concrete skills. It is not sufficient for inclusion to take place; instead, educators need to modify their practices and instruct differently for children with disabilities. Overall, there are limited studies within the US that link the variables within the present study.

Rafferty et al. (2003) analyzed the correlation between preschool students with severe/non-severe deficits and language/socialization performance based on inclusive or segregated classroom settings. Researchers were also interested in seeing if there were

child, parent, or family characteristics that impacted the pre- or posttest outcomes of the measures administered within the study. In order to rate disability severity for the cognitive measure, the research team administered the Weschler Preschool and Primary Scale of Intelligence Revised (WPPSI-R). The language and socialization measures, Preschool Language Scales, Third Edition (PLS-3), and Social Skills Rating System (SSRS), teacher version, were administered in the fall and spring of the corresponding academic year. Additionally, a chart review was conducted of the child's school file for background characteristics (e.g., age services started, parent/family characteristics, demographic information, etc.). Overall results revealed that at pretest students with higher functioning language and socialization skills were placed at a higher rate in inclusive settings. Furthermore, those students classified as non-severe appeared to be equally distributed between both classroom settings. Researchers found no significant differences for language development or socialization skills posttest for students classified as non-severe based on either classroom placement. A major finding was that when students were classified as severely disabled, greater language development and socialization skills were evident when the students participated in inclusive settings as measured by the PLS-3 and SSRS Teacher version. Furthermore, researchers concluded that there was no association between the pre- and posttest outcomes based on child, parent, or family characteristics. The significance of this article to the current study is for Admission, Review, and Dismissal (ARD) Committees to exercise caution with placement considerations and to not be biased in placing a higher rate of students with higher functioning skills into inclusive settings. This is of special importance given that students with more severe needs benefited in this study at higher rates in inclusive versus

segregated settings. There are limited studies within the US that link the variables targeted within the present study.

Similarly, Nahmias et al. (2014) investigated whether the type of preschool educational placement (i.e., inclusive, mixed disability, or autism-only) and student severity affected outcomes on the Differential Abilities Scale, Second Edition (DAS) for students with ASD. An extensive review of records was conducted for this study of early intervention records, previous cognitive assessments, diagnostic testing for ASD, and IEPs. In respect to social–emotional ability scores improvement was noted in the results of children who began with low social–emotional scores at baseline and were enrolled in inclusive classrooms versus autism-only placement. Results for communication outcomes indicated a 14.1-point increase at the second testing session on the General Conceptual Ability of the DAS for students who were in inclusive setting versus mixed disability placements. For participants at baseline with higher communication scores, the most significant benefits during the second testing on the DAS were for those participants who attended inclusive early childhood placement when compared to mixed disability placements. The relevance of this study to this literature base is that inclusion is preferable for children with ASD over mixed disability or autism-only classroom placement. There are limited studies within the US that link the variables within this study given that, as the researchers cited, “little research has investigated the relative benefit of various intervention environments for young children with ASD” (Nahmias et al., 2014, p. 311).

Schwartz, Sandall, McBride, and Boulware (2004) developed a combination of instructional components beneficial for children with ASD (e.g., applied behavior

analysis, imitation, play/joint attention, etc.) within an inclusive preschool model. The authors developed an approach to combine "explicit and intensive instruction needed by children with autism with quality components of preschool environments according to professional organizations such as the Division for Early Childhood of the Council for Exceptional Children and the National Association for the Education of Young Children" (Schwartz et al., 2004, p. 158). When this study was published, 48 children between the ages of 3 and 6 years old and their families had participated in a Project DATA classroom. These preschool classrooms were comprised of nine children with disabilities and seven children who were considered to be typically developing who received 20 hours of weekly instruction. The staff for each classroom included a lead teacher, an assistant teacher, and two aides, along with related services staff (e.g., speech/occupational/physical therapists) who provided push-in services within the classroom setting. Project DATA model was described by the authors as encompassing five components (a) high-quality inclusive early childhood program, (b) extended instructional time, (c) technical/social support for families, (d) collaboration across services, and (e) support for transition. Pre-assessment testing of the children included administration of the Childhood Autism Rating Scale (CARS) to confirm independent diagnoses of ASD. Additionally, children were administered the Assessment, Evaluation, and Programming System for Infants and Children (AEPS) pre- and post-assessment to determine growth across domains and functional outcomes. Interviews were also conducted with parents and school staff to obtain information regarding program satisfaction. Results of the study indicated that between pre- and posttest on the AEPS there was an overall 22% increase for the adaptive domain, 11% increase for the

cognitive domain, 21% increase for the social communication, 24% increase for the social domain, 30% increase for the fine motor domain, and 15% increase for the gross motor domain. Furthermore in the areas of functional skills the post-assessment gains were as follows: 18% increase in the number of children that could use at least five words spontaneously, 35% increase for their ability to follow directions, 32% increase in motor imitation, 45% increase in children who were toilet-trained, 8% increase in symbolic play, and 11% increase in cooperative play. The relevance of this research to the current project is that inclusion that is supported with the specialized implementation of blended curriculum and specific program components for children with ASD is demonstrated to yield progress across developmental and functional areas. As the researchers suggested, educational teams should not ask parents to place their children in the least restrictive environments without necessary specialized support for improvement. It is necessary to include a methodology that is evidence-based and can be progress-monitored more regularly than during progress report time or at reassessment every 3 years. There appears to be limited research in this area of the field.

Communication and Social Skills Research

Communication and social skills are two of the 10 domains within the Texas Prekindergarten Guidelines that are delineated by desired skill areas that should be evident by age 48 months. The language/communication and social/emotional development domains which are relevant for bilingual students with ASD in PPCD and prekindergarten programs are of interest to this study. The introduction for the language/communication domain calls for classrooms to be rich in language opportunities in order for maximum impact for the development of reading and writing skills.

Furthermore, this section references the process of cross-linguistic transfer in which ELs access prior knowledge in the home language (L1) to learn new concepts in the second language (L2). Educators are asked to give special attention to the development of pragmatics in order for ELs in their classrooms to learn rules of conversation and narratives. The language/communication Texas Prekindergarten Guidelines domains are expectations for 4-year-old students not in their L2, but in L1. The second domain of relevance to this study from the Texas Prekindergarten Guidelines is social/emotional development which was suggested within the document as one of the essential components for cognitive maturation. Educators serve as guides for "direct social skill instruction, explicit teaching, and repeated opportunities to practice skills" (Prekindergarten Guidelines, p. 31). Positive socialization results in completion of classroom activities without violating learning opportunities for other students.

Research seems to agree that inclusive settings for children with disabilities, counting students with ASD, prove beneficial for social and communication development. Communication benefits of inclusion for children with ASD were identified as most beneficial by Strain and Bovey (2011) when they occur during incidental teaching versus "tutorial-like instruction" (p. 134). Radley et al. (2016) investigated the efficacy of the Superheroes Social Skills program among two preschool children with ASD across four target social skills (i.e., Introducing Self, Get Ready, Participate, and Body Basics). Additionally, two typical peers also received social skills training; however, no data was collected for them. The authors were interested in determining if training of specific social skills for young children with ASD was maintained after the intervention and also if parents/teachers rated improvement on the

social functioning following the intervention. The authors recruited two children with ASD and two typical peers from a preschool in the northeastern United States. The intervention was delivered within a school by a licensed school psychologist who completed the training stated within the program manual. The social skills program included didactic instruction of 11 hour-long, weekly sessions via the utilization of video modeling and follow-up practice among typical peers and students with ASD. The authors concluded that the participants with ASD mastered skills after only two to three sessions, which was more time than older elementary students required in other studies that also utilized this program. Six weeks after the discontinuation of the intervention, maintenance was observed for all social skills with both participants. The relevance of this research to the current study is that it is necessary to consider that inclusion may not be sufficient to support social skills acquisition for children with ASD. It is important to deliver systematic instruction for this area of language in addition to teaching typical peers the necessary strategies to interact with peers who have ASD and need support in this area of communication. Furthermore, a social skills program such as the one presented by the authors may best be delivered by a professional trained in special education. Overall, there are limited studies within the US that link the variables within this study.

Conversely, Locke et al. (2012) examined specific characteristics of typical peer models of children with ASD and also if changes were observed in their social behavior in comparison to non-peer models after the intervention. The researchers had typical peer participants and control group complete Friendship Survey, Friendship Qualities Scale, and Peer Network Dyadic Loneliness Scale from which social network centrality and

friendship reciprocity were derived. The children with ASD were randomly placed into target child mediated, peer-mediated, combination of target child and peer-mediated, and control group (inclusion). Intervention training for peer models included direct instruction (e.g., initiate a game, initiate/sustain a conversation, praise), role-playing, modeling, and practice. Three children were selected from the child with ASD's classroom and peer models engaged twice a week during recess and lunch. Results of the study indicated that typically developing peer models demonstrated higher degrees of connectedness and social aptitude toward children with ASD than non-peer models. The results were true for data collection at the beginning and post-intervention. Peer models were found to either be nuclear or secondary in social network centrality, which proves these children had stable connections and popularity within the classroom. Results suggested that the social standing of peer models within the classroom structure remained high post-intervention, and higher interactions with children with ASD were evident. This research supports that targeting social skills with peer models can also be beneficial during participation in unstructured settings (e.g., lunch, recess, etc.). It can serve as evidence for administrators, teachers, and parents that it is not detrimental but rather can be beneficial for typically developing peer models to develop friendships and serve as support for children with ASD in the classroom. There appears to be limited research in this area of the field.

Kjellmer, Hedvall, Fernell, Gillberg, and Norrelgen (2012) examined how cognitive function, severity of autism, and adaptive behavior influence language and communication skills of children with diagnoses of ASD, ASD unspecified, pervasive developmental disorder not otherwise specified (PDD-NOS), and Asperger syndrome

among children ages 24–63 months in Sweden. The children were grouped into intellectual disability group, learning problems (developmental delays), and normal cognitive abilities. Via observation or parent report the following measures were completed: MacArthur-Bates Communicative Development Inventories, Autistic Behavior Checklist, and Vineland Adaptive Behavior Scales (Daily Living Skills and Socialization). Results indicated that the best predictor for verbal communication abilities was the cognitive ability of the child, not his/her severity of symptoms or adaptive functioning. On the other hand, nonverbal communication appeared to have less of a relationship to cognitive functioning and more to the severity of symptoms and adaptive behavior. This study was a relevant contribution to the current research base to support generalization and the inclusion of severe students with typical peers to decrease symptoms of ASD. Teaching the adaptive skills necessary and development of nonverbal communication (e.g., gestures, pointing, etc.) assists children with ASD to physically manipulate conversation partners in order to gain access to wants/needs/preferences, and thereby later leads to an increase of verbal skills. Overall, there are limited studies within the US that link the variables within this study.

Kalyva and Avramidis (2005) examined if the utilization of the Circle of Friends program proved efficacious for the improvement of communication and social skills in preschoolers with autism in London. Three boys were part of the randomly assigned intervention group, and two remained in the control group. The control group received the intervention after the completion of the study. The Circle of Friends program was conducted over 3 months for 30-minute sessions, once a week. There were five typically developing peers that were selected to interact with the children with ASD during circle

time. These children were told that they were helping peers with ASD learn how to ask others to play. The researchers measured the number of responses by contact initiatives from other peers and also the initiation attempts by the child with ASD. Materials/toys were utilized that were preferred by the children with ASD to increase motivation. Results indicated that there was an increase in the responses and initiations of the experimental group even during the follow-up 2 months after the intervention was completed. The researchers concluded that given that this program assists with basic communication, it then gives way for the development of social skills. This study can be utilized to support inclusion in that conducting this program within circle time in a preschool program for children with disabilities (PPCD) classroom may not be the most beneficial input for children with ASD, considering the lack of trained typical peers to assist with the activities. Furthermore, direct instruction for typical peers should be conducted in order to assist both the child with ASD and the typical peers on how to respond and what to look for during communication exchanges. Overall, there are limited studies within the US that link the variables within the present study.

Thurm, Lord, Lee, and Newschaffer (2007) analyzed if there were predictors at age five of language skills (comprehension and expression) for children with diagnoses of ASD, PDD-NOS, and other developmental disorders not related to ASD. The researchers were also interested in providing insights into the specific characteristics of children with ASD who despite intact cognitive ability continued to present with significantly decreased language skills at age five. An initial assessment was administered at age 2 and follow-up at age 3 (for children suspected to have autism) and also between ages 4 and 5. Sessions were divided into two blocks. A diagnosis was given at age 2 and then

at age 5. The measures administered (i.e., standardized tests and parent questionnaires) were selected on the basis of the child's developmental level and their ability to establish a basal and reach a ceiling on all tests. All participants' intellectual ability (verbal/non-verbal) were assessed for this study. Results indicated that age 2 and 3 measures of cognition and language (parent report/child completed) predicted receptive and expressive language development at age 5. The strongest predictor of age 5 language skills was age 2 non-verbal cognitive ability. Furthermore, age 3 communication skills were stronger predictions of age 5 language skills for children with ASD. In this study, expressive language outcomes were associated with the imitation of simple sounds and support a link between oral-motor speech abilities and expression among children with ASD. The findings of this study are of importance because if age 2 and 3 language outcomes predict outcomes at age 5, then the rigor in which we provide early childhood intervention needs to incorporate opportunities for interactions with typical peers. These interactions should include responding to joint attention, imitation of simple sounds, and development of cognitive processes that give children with ASD higher likelihood for better outcomes regarding language skills later on in life. There appears to be limited research in this area of the field.

Research seems to agree on the efficacious outcomes for the communication and socialization skills of students with ASD and also those of typically developing peers during inclusion opportunities in preschool. Although the trend of inclusion has gained acceptance over the last two decades for school-aged students, the statistics are not equitable for preschoolers. Trends suggest that slightly more than half of preschoolers with disabilities are instructed in educational placements separate from their typically

developing peers. Furthermore, the research lacks breadth for evidence base within the EL-demographic group who are eligible under the criteria of Autism. Within the United States, limited research has been conducted analyzing the inclusion of children with ASD into general education bilingual prekindergarten classrooms.

ASD and Curriculum

TEACCH background and research. TEACCH is a statewide comprehensive treatment model developed in the 1970s and created for meeting the needs of people working with and for individuals that are affected by ASD. TEACCH is currently managed as a University of North Carolina, School of Medicine, program (Welcome section, para. 1). Mesibov and Shea (2010) stated this approach is generally accepted as "'Structured Teaching'.… [which] "is based on evidence and observation that individuals with autism share a pattern of neuropsychological deficits and strengths that we call the 'Culture of Autism'" (p. 571).

The Culture of Autism was characterized by Mesibov and Shea (2010) as being inclusive of the following eight characteristics: (a) difficulty processing auditory stimuli, but improved when presented via visual stimulus, (b) difficulty in connecting and formulating meaning due to attention to detail, (c) variable attention skills that can range from overly focused causing difficulty in shifting attention to increased levels of distractibility, (d) difficulty communicating due to language impairment that includes the area of pragmatics/socialization, (e) time concept challenges in that individuals with ASD are not certain on how fast/slow to work on a task or even when the task begins and finishes, (f) when routines are disrupted individuals with ASD become upset and confused that make it difficult for generalization of skills to various environments, (g)

impulsive nature to participate in preferred activities of narrow interests, and (h) sensory seeking or avoidance behaviors that are marked in nature.

Structured Teaching based on the explanation by Mesibov and Shea (2010) is comprised of four essential principles: (a) structure is necessary in order for individuals to comprehend the environment and activities, (b) visual strengths and interests must be utilized for advancement of weaknesses, (c) motivating interests of the individual should be utilized to engage them in activities, and (d) receptive language precedes expressive language; therefore, labels such as objects or visual symbols are utilized as part of scheduling. The necessity for evidence-based research in treatment interventions for children and individuals with ASD has been answered in a global manner by research teams.

D'Elia et al. (2014) examined if TEACCH was delivered in a low-intensity manner (e.g., < 20 hours per week) across home, and school environments in Italy proved beneficial to reduce autistic symptoms and parental stress. Participants in the experimental group received 2 hours at home and 2 hours at school of TEACCH interventions for 2 years. The control group received 2 hours of psychomotor therapy and 2 hours of speech therapy for the same duration. The researchers allowed the parents to determine if they were going to be part of the experimental group versus the control group. To measure changes in the autistic symptoms of the participants and parental stress, the researchers utilized the Autism Diagnostic Observation Schedule (ADOS), Griffith Mental Developmental Scales, Vineland Adaptive Behavior Scale, MacArthur Communication Developmental Inventories, Child Behavior Checklist, and Parenting Stress Index. Four probes including baseline were conducted throughout the study by the

researchers. Results indicated positive changes in the main outcome indicators (i.e., severity, communication, and adaptive behavior) of the participants on the measures administered; however, no significant differences were found between the experimental group and the control group when a low-intervention TEACCH strategy was utilized. Between baseline and the third probe 12–15 months after the study began the experimental group evidenced improvement on all of the ADOS classifications. Regarding parental stress, there was a reduction evidenced among the experimental group but not the control group. The relevance of this study to the current research is that low-intensity specialized interventions such as TEACCH prove as insufficient support for students with ASD. Considering that home training is typically a component of students' IEPs, there needs to be special attention to the rigor of the interventions in place and how these will be progress-monitored to advance academic and social/communication programming. Overall, there are limited studies within the US that link the variables within this study.

Tsang, Shek, Lam, Tang, and Cheung (2007) examined the effectiveness of implementation of the TEACCH program among 18 preschoolers with ASD in Hong Kong, China, over 12 months. The control group included 16 preschoolers who received varied treatment strategies which did not include TEACCH methodology. Preschoolers in the experimental group received 7 hours of daily TEACCH Structured Teaching at their school, Heep Hong Society, and had no previous exposure to TEACCH methodology. To measure social adaptive functioning and cognition, the authors utilized the Developmental Scale of the Chinese version of Psycho-educational Profile-Revised (CPEP-R), Merrill-Palmer Scale of Mental Test, and the Hong Kong Based Adaptive

Behavioral Scales (HKBABS). Probes were conducted at baseline and posttest at 6 and 12 months. Results of the study during the first 6 months of intervention indicated that the experimental group evidenced greater gains on the CPEP-R subtests of perception, fine motor, and gross motor than the control group. Conversely, after the initial phase of intervention, the control group demonstrated greater gains on the daily-living domain and with the overall standard score of the HKBABS. At the 12-month Posttest 2, the experimental group evidenced steady and substantial improvement for the total and individual subtests of the CPEP-R, raw scores and mental age of the Merrill-Palmer Scale of Mental Test, and all indicators of the HKBABS except the overall sum of domain standard score. Researchers noted that the initial intervention period of 6 months evidenced the most significant gains in test data except the socialization domain. The socialization domain evidenced greater gains between 6 and 12 months of the experimental group's participation in TEACCH methodology. Children with ASD in the experimental group evidenced gains in perceptual abilities, fine/gross motor skills, eye–hand coordination, cognition, and imitation abilities, but no significant gains were evidenced in the area of communication skills. The control group between baseline and Posttest 1 improved on the total CPEP-R developmental scores, but not on individual subtest indicators. Additionally, the control group also evidenced improvement on the raw score and mental age of the Merrill-Palmer Scale of Mental Test and all domain total scores of the HKBABS. Through testing results of this study there was an indication that children with ASD in the experimental group evidenced gains in perceptual abilities, fine/gross motor skills, eye–hand coordination, cognition, and imitation abilities; however, without significant difference in communication skills between them and the

control group participants. This study was of importance to the current research base given that researchers proved that despite cultural and language differences TEACCH methodology proved efficacious in most domains with children outside of the United States. Furthermore, the domains of socialization and communication appear to take a longer period to develop in children with ASD without exposure to typical peers despite specialized methodology. Overall, there are limited studies within the US that link the variables within the present study.

Panerai et al. (2009) studied the implementation of the TEACCH program in three settings, in which two placements (i.e., residential center, home/mainstream school) received TEACCH programming, and the third placement (i.e., inclusion in mainstream school) was a nonspecific approach. The study included 34 participants across 3 years in Italy. The relevant finding of this study was that the participants in mainstreamed classrooms without specific methodology being implemented regularly benefited the least from the other two groups receiving TEACCH programming. The residential center and home/mainstream school experimental groups exhibited statistical significance in all domains of the Vineland Adaptive Behavior Scale, which the mainstream-only group failed to do. The significance of this study to the current project was "that TEACCH and 'inclusion' are not in contrast, but they seem to strengthen each other if they are used together…inclusion in a regular class in not sufficient" (Panerai et al., 2009). Overall, there are limited studies within the US that link the variables within this study.

LEAP background and research. In contrast, Erba (2000) described the theoretical foundation of a LEAP classroom as being centered on the social deficit of children with ASD and directly influenced by behavioral learning theory. LEAP was

described as a combination of ABA techniques and developmentally appropriate practices (DAP) within an inclusive educational setting. LEAP utilizes "both reinforcement- and stimulus-control teaching techniques" (p. 85). The guiding principles of LEAP include (a) benefit for all children within inclusive educational settings, (b) consistent programming across all environments for children with ASD, (c) collaboration among teachers and parents for improved outcomes, d) exposure to typically developing peers given they serve as good agents for learning opportunities, (e) programming for interventions that are individualized, planned, and systemic, and (f) benefit from instruction that follows DAP for children with ASD and typically developing peers. Within LEAP classrooms, independent play skills, social exchanges, and behavior are targeted by behavioral techniques such as prompting, fading, and reinforcement. Additionally, ABA techniques that include modeling, milieu language strategies, and generalization are incorporated within LEAP classrooms.

Erba (2000) summarized that "the program consists of an integrated preschool classroom, behavioral skill training for parents, and outreach training services, components that reflect the program's diverse theoretical framework" (p. 86). The structure of traditional LEAP classrooms involves 10 typically developing children and six children with ASD who attend programing hours per day during the full calendar year. LEAP is considered a peer-based intervention since "typically developing peers act as indirect mediators of behavior change, behavior models, and direct agents of training" (p. 86). The children in this program each have individualized plans that are reinforced positively. For approximately 30 minutes each day children with ASD participate in peer-imitation training to maximize the opportunities for imitation of typically

developing peers. Conversely, typically developing peers are selected as peer trainers within the classroom and are taught strategies for how to attempt to engage peers with ASD in play-based interactions. As part of their training typically developing peers are also prepared for how to deal with failed attempts to engage their peers with ASD into a positive play or social interaction. Educators utilize positive reinforcement strategies for all children in the classroom. Instructional programming for children with ASD is "designed to resemble that for typical peers, focuses on functional skills, incorporates planned activities into those selected by the children, is individualized to fit each child, and should promote generalization, resulting in acquisition of the desired skill by the child" (p. 87).

Strain and Bovey (2011) conducted the first randomized controlled trial (RCT) in a group comparison design over 2 years of Learning Experiences and Alternative Program for Preschoolers and Their Parents (LEAP) implementation. The first group consisted of "full-scale LEAP replication" (p. 136) classrooms, while on the contrary, the comparison group had classrooms implementing LEAP after only receiving indirect training and a review of the training manuals. The researchers were particularly interested in this group comparison as there is a large number of school districts that purchase the training manuals, though there is only a "handful that have been involved in formal replication" (p. 136). The classrooms selected in this RCT were matched on (a) intensity of services, (b) inclusive setting enrollment of students with ASD, (c) 1:5 ratio of teacher to students, and (d) minimum standards of typically developing peers within the classrooms. Overall, 27 classrooms across 16 school districts in seven states met the inclusion criteria for this RCT as LEAP replication. Conversely, 23 classrooms served as

the comparison group of which all received indirect LEAP training with yearly follow-up in regard to district training provided. The following two treatment outcomes, which are of interest to this study, were reported by Strain and Bovey (2011). Firstly, 90% of LEAP training classrooms were implementing the program with high fidelity after 2 years, as compared to only 38% of the classrooms using "manualized materials" (p. 142). Secondly, progress for adverse behaviors, cognition, language, pragmatic skills, and overall generalized autism symptoms was greater in LEAP replication classrooms. Progress was measured in this study by improved outcomes in the Childhood Autism Rating Scale (CARS), Mullen Scales of Early Learning, the fourth edition of Preschool Language Scale (PLS-4), and Social Skills Rating System (SSRS). Furthermore, the authors stated that "comparison classrooms were also far less likely to individualize instructional practices, carefully teach typical peers to be instructional agents, or use function-based practices to impact problem behavior" (p. 142). This research is relevant to the current literature base in determining whether the school district being utilized for the current study is a training replication or is receiving the less effective indirect training. It would be of value to find out how administrators, program specialists, educators, and paraprofessionals are being trained on the implementation of LEAP methodology. There appears to be limited research in this area of the field on bilingual students with ASD.

Strain (2017) conducted a follow-up to a previous RCT in which, in an incidental manner, educational placement was of interest as a result of previous CARS results from the original study four years prior. The researcher inadvertently became interested in why students with ASD in preschool who achieved typical range for age expectations

were in “less than fully inclusive classes” (p. 124) four years later. Interviews were conducted with study data collectors in which three themes emerged as possible explanations for educational placement variations: (a) curriculum, (b) para-educators, and (c) high expectations in the educational system. The research team’s data collectors noticed that students with ASD in inclusive versus segregated classrooms were exposed to significantly opposing curriculum/activities. Children with ASD who were placed in inclusive preschool settings were exposed to regular education with the rigorous implementation of the curriculum. Whereas, segregated classrooms implementing “‘autism’ curricula.…for the most part, were not focused on age or grade-level academic content, and in many ways actually mimicked content that children were exposed to in preschool (e.g., shapes, object names, colors, etc.)" (p. 124). The second theme of para-educator support, noticed by the study’s data collectors, was that during inclusive settings children with ASD were reported to complete higher quality of work with a greater level of independence varying in prompting/cueing. In segregated programs, para-educators provided either significantly higher support resulting in less student independence or were tasked to complete clerical tasks instead of providing support for students. Finally, in inclusive settings, students with ASD received feedback and were held to high expectations in regard to all aspects of the curriculum. Conversely, in segregated classrooms, the study’s data collectors noticed that most of the feedback being given to students with ASD was regarding compliance and behavior management but rarely included academic praise. Strain (2017) posited at the conclusion of the article that educational placement is not merely based on behavioral changes observed in students with ASD during preschool placements, but rather placement may be driven by district

resources and programming. The author suggested that educational placement may need to be considered an independent variable instead of a dependent variable in future studies. This study is of importance to the current research because of the significant differences that students with ASD experience when in segregated versus integrated classrooms. The interventions that are in place during preschool and are successful should yield the least restrictive placements for students, regardless of district resources. Student outcomes and program data need to drive educational placements in order to grant all students greater access to the general education curriculum. Overall, there appears to be limited research in this area of the field that is specific to bilingual students with ASD.

ASD and bilingual research. Hambly and Fombonne (2012) examined in Canada whether bilingual language exposure had an impact on children with ASD ages 36–78 months depending on whether exposure occurred during infancy or post-infancy period. The authors utilized the Language Environment Interview (LEI) from which major language exposure was identified. Additionally, families completed language diary for language exposure data, and participants/parents were administered the following: Completion of Social Responsiveness Scale (SRS), MacArthur Communicative Development Inventory: Words and Sentences (MCDI), and Vineland Adaptive Behavior Scales, Second Edition. The authors concluded that no additional delays based on bilingual status were evident in the area of language. Furthermore, language dominance was not impacted by the timing of exposure during infancy or post-infancy period. In this study, 62% of children who were bilingually exposed used single words in the second language (L2); however, vocabularies were decreased compared to the home language, and only a few participants used phrases in L2. The relevance of this

study is that given bilingually exposed children with ASD do not appear more delayed than monolingual counterparts, it is beneficial to look into bilingual education for programs such as PPCD, LEAP, etc. Children with ASD can be included in bilingual classroom environments instead of English-only due to current evidence base for their capacity to be bilinguals. Instruction in the home/dominant language may produce greater benefits that can transfer to English. Overall, there are limited studies within the US that link the variables within this study.

In another Canada-based exploratory study, Ohashi et al. (2012) examined the language abilities of young children raised in monolingual and bilingual homes only a few months post diagnosis of autism spectrum disorder (ASD). A minimum of 30 spoken words was part of the inclusion criteria as that age is a developmental milestone for using a combination of nouns and verbs in speech. Data collection measures included Preschool Language Scales, Fourth Edition (PLS-4), Vineland Adaptive Behavior Scales, Second Edition, and services log of language-related intervention. Results indicated no differences between bilingually exposed and monolingual groups on the six measures of early language development. Additionally, there was not a difference of age of first words and age of first phrases between the groups. Overall, there were no differences across groups in autism-related communication impairments and therefore support for bilingualism among children with ASD. Findings within this exploratory study indicated that bilingualism does not burden the language development of children with ASD. This study analyzed data for French/English bilinguals; it would be interesting to analyze data for Spanish/English bilinguals. Overall, there are limited studies within the US that link the variables within the present study.

Reetzke et al. (2015) investigated the structural (i.e., semantics, articulation, syntax) and pragmatic language abilities of monolingual and bilingually exposed children with ASD being raised in China. Parent questionnaires and communication checklists were adapted for cultural appropriateness for Chinese families. The researchers found that there was no adverse association between bilingual exposure and language development between dominant and non-dominant language. Furthermore, no relationship was evident between the age of onset for second-language exposure and language use on any measure within this study. The connection of this research to the current study is that even in languages that are tonal in nature, such as Chinese, when compared to Latin-based languages, such as Spanish, there is no adverse relationship between bilingually exposed children on the autism spectrum. Professionals need to keep current with the literature being published for best practices in order to support the recommendations being given to families during initial placement and transitions. Overall, there are limited studies within the US that link the variables within the present study.

Valicenti-McDermott et al. (2012) analyzed if language acquisition differences existed between young children with ASD who were exposed to English-Spanish home environments and their peers being raised in monolingual English homes. Eighty participants with a diagnosis of ASD under the age of 3 years were selected from a university-level developmental center predominantly serving Bronx residents of Hispanic and African-American descent. The children received speech and language evaluations from 2003 to 2010 and were equally split regarding the bilingual versus monolingual home environment. After analyzing speech and language criterion-reference and

qualitative data from the examiner and parental report, the authors concluded that there were no significant differences in receptive or expressive language skills relative to language exposure at home. One of the only differences observed in the demographic and ASD-characteristics measures was that bilingual children received higher adaptive behavior scores. The importance of this research to the present study was best summed by the authors: "ASD is diagnosed in children from all cultures, races, and socioeconomic backgrounds, and yet more information is needed on specific subpopulations to understand how particular variables may confer additional vulnerability or protection for individuals with ASD" (p. 945). Overall, there appears to be limited research in this area of the field with bilingual students with ASD in the United States.

Conclusion

Although the legal precedent for inclusion in early childhood was established decades ago, the variables of ASD and bilingualism among children participating in PPCD classrooms have only recently started to be explored by researchers and educational teams. The scope and sequence of early childhood educational programs must be vertically and horizontally aligned via curriculum mapping for increased relevance and rigor for all students enrolled within a district. Best practices utilized by bilingual educators must be fused with evidence-based protocols that have proven beneficial in the development and reduction of symptoms for children with ASD. For inclusive education to be efficacious and lead to least restrictive placements in later grades, early childhood general and special education teachers must be afforded adequate resources for differentiation and individualized planning for bilingual children with ASD

entering preschool. A recommendation checklist based on the research presented within this chapter is provided in Appendix A.

Chapter III

Methodology

Individually and collectively in teams, educators at every grade level receive and review curriculum prior to selection of the materials that will be utilized for instructional purposes. Jacobs (1997) describes this process as micro-level analysis data, which frequently only receives horizontal alignment within grade levels and lacks the vertical alignment, or macro-level analysis, across a K–12 curriculum. Due to the necessity of narrowing the social and communication gaps for bilingual children in Preschool Programs for Children with Disabilities (PPCD) programs, it is important for team planning among PPCD teachers and prekindergarten teachers to occur regularly. In addition to alignment, it is also critical for teachers to identify ways in which students in PPCD are provided meaningful contexts throughout the school day to practice and generalize social and communication skills with typically developing peers. This curriculum alignment is particularly relevant given that statistics from TEA (2016) indicated that during the 2015–2016 academic year, 18.5% of students in Texas public schools were English Learners (ELs), and 8.7% were enrolled in a special education program.

Furthermore, general education prekindergarten teachers must develop additional competencies in order to effectively differentiate curriculum for preschoolers with disabilities during inclusion opportunities. The USDOE (2016) non-regulatory guidance of Every Student Succeeds Act (ESSA) suggested that educators required support via professional development opportunities that included specialized training to (a) adequately determine the necessary accommodations for students' access to curriculum,

(b) assist in the implementation of campus-wide, evidence-based interventions to promote "healthy social, emotional, and behavior development" (p. 20), and (c) support universal design for learning in respect to environmental modifications and also instructional tools/strategies. The USDOE (2016) guidance also suggests that educators must have a clear understanding of the developmental sequence of young children in order to be able to integrate and individualize their learning experiences across multiple areas of development.

Extent of the challenge

The data provided by the central city – suburban school district for analyses indicated that during 2019-2020 academic school year 1,221 students with the label of Autism (AU) were enrolled. Of those students, 404 were identified as having a primary language of Spanish. The district trends over the last five academic school years are illustrated below in Figure 5.

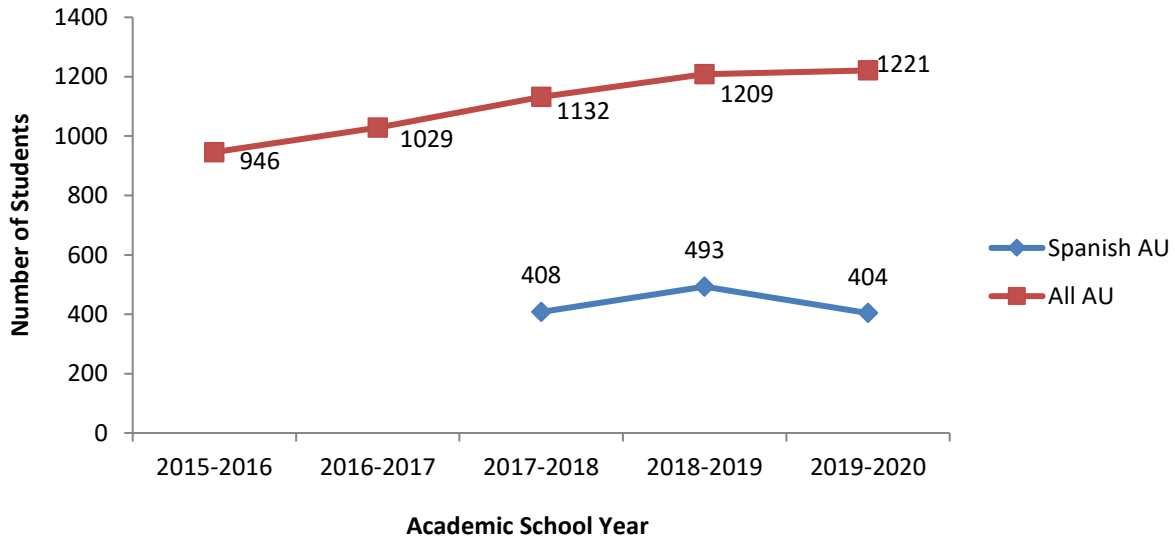

Figure 5. District data trends for students with AU from 2015-2020.

The school district was unable to provide the number of students with Spanish as the identified home language for the 2015-2017 academic school years.

Texas Prekindergarten Guidelines

Like many states, Texas does not have a state-required prekindergarten curriculum as there is not a mandated prekindergarten program. For this reason, the Texas Commissioner of Education gathered early childhood specialists and experts to draft the 2015 Texas Prekindergarten Guidelines. The stated purpose for the guidelines is for the prekindergarten programs in the state of Texas to align with the Texas Essential Knowledge and Skills (TEKS). Researchers introduced the guidelines by emphasizing research trends that have emerged that focus on "greater emphasis…on young children's conceptual learning, acquisition of basic skills, and participation in meaningful, relevant learning experiences" (TEA, 2015, p.1). The Texas Prekindergarten Guidelines begin with the first few sections being dedicated to the two populations who are relevant to this study: English Learners (ELs) and students with disabilities.

The authors of the guidelines begin by emphasizing that educators must support the learning of both of this study's populations, ELs and children with disabilities. The Texas Administrative Code, Title 19, Chapter 89, and Texas Education Code, section 28.005, were referenced within the introduction of the guidelines with the purpose of bringing attention to bilingual education state policies. It was referenced that these state policies are in place to safeguard English language proficiency is attained in the areas of speaking, reading, and writing for the development of academic skills in the home language (L1) and the second language (L2).

The second section addresses how the instruction of ELs will be supported via the guidelines. Though the various models of bilingual education (e.g., transitional bilingual, dual language immersion, etc.) are briefly discussed, the main point is that regardless of the ELs instructional placement or native language, the guidelines are meant to be implemented with all prekindergarten students. This section includes a brief outline of instructional recommendations for educators that includes best practices for ELs (e.g., visual cues, cross-language connections, etc.).

The third section focuses on supporting the instruction of children with special needs utilizing the guidelines. The authors began this section by including evidence base for the positive outcomes of inclusion for typically developing peers and students with special needs to share classrooms. Three areas were posited that are identified within the research as being quintessential for children with disabilities to integrate into part of the school culture: (a) development of positive social–emotional skills, (b) acquisition of language/communication, thinking, and problem-solving, and (c) appropriate behavior to adapt and complete self-help skills. The first two of those areas are of interest to the current study and were discussed in the aforementioned literature reviewed.

Research Design

The current research utilized a descriptive, exploratory research design combined with a quantitative survey research method. First, the investigator analyzed the extent of the challenge for bilingual and monolingual students with ASD within the school district utilized for this study using 2015-2020 data. Then, the 2015 Texas Prekindergarten Guidelines and the scope and sequence of PPCD curriculum, as well as that of bilingual prekindergarten curriculum, were analyzed to formulate the curriculum maps

incorporated in this study. The purpose of these curriculum maps was to identify commonalities and gaps for educators to effectively plan higher degrees of inclusion times for bilingual students with autism spectrum disorder (ASD) enrolled in PPCD classes. Furthermore, an analysis of the prekindergarten teacher professional development opportunities and completed courses was conducted using 2014-2019 data. Finally, the quantitative method of a survey was utilized for gathering data on general education teacher perceptions regarding knowledge of inclusion and focusing on the topics of socialization and communication skills with prekindergarten teachers in the 2019-2020 academic year. Lodico, Spaulding, and Voegtle (2006) described the purpose of survey research in the following terms: to "describe behaviors and to gather people's perceptions, opinions, attitudes, and beliefs about a current issue in education" (p. 12). As described by the authors, the survey questions were formulated after an extensive literature review relevant to this study and based on participant responses; conclusions will be generated. Additionally, Lodico et al. (2006) suggested that descriptive survey research accounts for the majority of educational research, with an estimated figure of 70% falling into this category. Web based survey response rates of approximately 30% were cited by Van Mol (2017) as achievable when an additional reminder for completion was disseminated to the participants.

Permission for this research was approved by the University of Houston's IRB panel, the Research and Evaluation Department of the school district utilized for this study, as well as the Deputy Superintendent of Academic Achievement for the district. The explanatory paragraph that was reviewed with the prekindergarten teachers via email and at a district prekindergarten staff development can be found in Appendix B. Rose,

Sidle, and Griffith (2007) cited strong support in the survey literature for monetary compensation as a means of improving response rates. An incentive for participation in the completion of this study's survey was offered to participants in the form of a gift-card drawing. Two of the teachers who completed the survey and voluntarily provided their email addresses within the 10-day period were entered into a drawing to win a $50 gift card.

Setting

The study was conducted in a central city – suburban setting in the south. The school district mission, as stated on their district website, is to be "the gateway to unlimited opportunity for the youth of our culturally rich community, [and it] is to empower students to become accomplished, self-directed, collaborative, lifelong learners, who boldly contribute to an increasingly complex and evolving world by engaging them in positive relationships, rigorous curriculum, and innovative meaningful experiences" (District website, Home page). For the 2016–2017 academic calendar year, the district enrolled 56,137 students of which 2,524 were in early childhood education or the prekindergarten program (Texas Academic Performance Report, 2017). The ethnic distribution of the top three student groups within this school district were 46,433 Hispanic; 4,247 African American; and 3,289 White. Figure 6 illustrates the ethnic distribution data by student percentage.

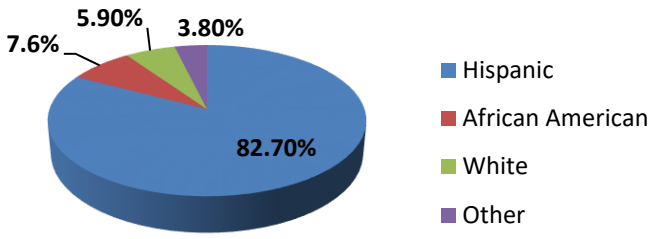

Figure 6. 2016-2017 ethnic distribution of the school district.

In regard to the two subgroups of importance to this study, 16,907 students of the total student population were ELs, and 5,269 students of the total student population for the district were identified with special needs. Of these students with special needs, 1,006 students of the subgroup received services with an eligibility label of Autism (AU) and 53 students of the subgroup were considered Non-Categorical Early Childhood (NCEC). Figure 7 illustrates the data by student percentage.

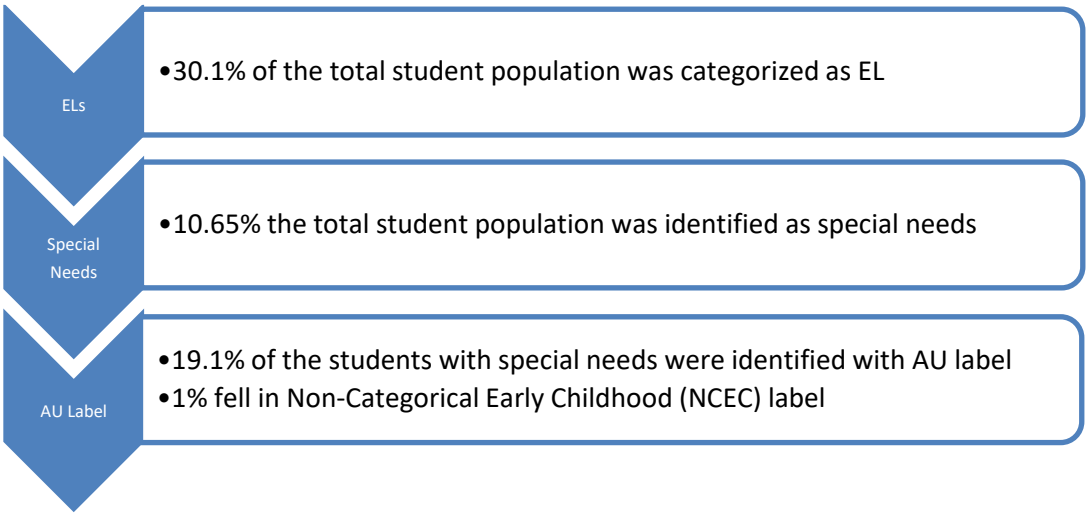

Figure 7. Percentage of EL, special needs, and students labeled with AU.

Population

For the purpose of the survey, based on data provided by the Early Childhood Coordinator, the school district utilized for this study employs 111 general education

prekindergarten teachers across 36 campuses. Of these prekindergarten teachers, 46 are bilingual classroom teachers and 65 provide English-only instruction. Across the district 104 prekindergarten classrooms are full-day and 14 are half-day instruction. Additionally, to gain perspective for the curriculum mapping portion of this study, the school district has 15 PPCD classes, of which 3 classes are for students with severe impairments, 6 Learning Experiences and Alternative Program for Preschoolers and Their Parents (LEAP) classes, and 2 Special-Prekindergarten classes. It should be noted that there is a Preschool Academic Behavior learning Environment (PABLE) for students with severe Autism. However, this teacher was not included in this study as inclusion is not yet an option for the students in this setting.

Participants

Participant recruitment included a brief oral presentation during a back to school staff professional development day. The voluntary participants of the teacher survey were 66 of the 111 prekindergarten teachers employed by the central city – suburban school district during the 2019-2020 academic year. Demographics for the survey participants follow in Table 1.

Table 1.

Prekindergarten teacher demographics for survey participants

Gender		Degree		Teaching Certificate					
F	M	BD	MD	Gen EC-4/EC-6	SPED (EC-12)	SPED Supp.	ESL (EC-6)	Bil Gen (EC-4/EC-6	Other
63	3	55	11	33	1	1	6	23	2

Note. F= female; M= male; BD= Bachelor's Degree; MD= Master's Degree; Gen= generalist; EC=early childhood; SPED= special education; SPED Supp= special education supplemental; ESL= English as a Second Language.

Instrumentation

Curriculum Maps. For curriculum mapping, the school district provided electronic copies of the Reading and Social Studies Spanish scope and sequence for the 2018-2019 school year. Additionally, the researcher was granted online access to the PPCD scope and sequence via an Office 365 SharePoint folder during the same academic year. The school district also provided two sets of professional development logs containing all professional development courses offered beginning in 2014. The first log contained courses provided by the Early Childhood Coordinator and peer facilitator team. The investigator requested an additional course log with a crossmatch of elementary and special education courses completed by the prekindergarten teachers.

Teacher Preparation: Logs. The state of Texas requires school districts to maintain a log of all professional development provided by the school district to all the teachers. The enrollment and tracking system for the teachers within the central city – suburban school district utilized for this study, are maintained via Eduphoria, part of an employee online district portal. The school district provided professional development logs for 154 courses that were taught by the prekindergarten Early Childhood Coordinator and peer facilitators. Furthermore, a custom log of 156 professional development opportunities which prekindergarten teachers attended with the crossmatch for the keywords of elementary and special education was also provided by the school district for analyses.

Survey. The survey developed for this study included a section on teacher demographics and a section on the professional development training completion on inclusive practices. The questions regarding teacher knowledge were generated from the

topics of the subsections of the Texas Prekindergarten Guidelines, Social/Emotional Development Domain (i.e., self-concept, self-regulation, relationships with others, and social awareness), and the Language/Communication Domain (i.e., listening comprehension skills, conversational skills, speech production skills, vocabulary development skills, sentences and structure skills). Additionally, the last four questions were in general topics of pedagogy. The Survey Monkey link was distributed via district email to the 111 prekindergarten teachers provided by the school district. The results of the survey will be used in the analyses to propose future professional development topics to be offered by the partnering school district.

Procedures

Extent of the ASD Challenge. The data for the total number of students with a label of AU was provided by the school district starting with 2015-2016 academic year to the present. Additionally, data from the 2017-2018 academic year to the present was provided for students with a label of AU who also reported Spanish as a home language. The data was exported to IBM SPSS Statistics program and analyzed to identify statistical frequencies (i.e., Mean, Median, Mode, and Standard Deviation).

Curriculum Mapping. For the curriculum mapping portion of the study, the researcher generated two tables, one for PPCD and the other for prekindergarten, to serve as a checklist for the two domains pertinent to this research: (a) social and emotional development and (b) language and communication domain of the Texas Prekindergarten Guidelines. The monthly tables for PPCD and nine-week tables for prekindergarten scope and sequence can be found in Appendix C. The prekindergarten academic subjects analyzed for the purpose of this study were Reading and Social Studies. However, for

PPCD the subjects analyzed were Reading and Social Studies/Science. Science was included for PPCD, due to the manner in which PPCD lesson plans grouped these two academic subjects within the document.

For later analyses, the prekindergarten tables were divided into Social/Emotional Development and Language/Communication Domain with Reading and Social Studies independently delineated in each table. The researcher was interested in: (a) the total number of objectives found in Reading and Social Studies scope and sequence, (b) the number of objectives not addressed explicitly in each subject, (c) the number of instructional practices for targeting each of the two domains in Reading, and (d) the number of lessons/hands-on activities for targeting each of the two domains in Social Studies. The researcher reviewed each of the prekindergarten four, nine-week scope and sequence documents for Reading and Social Studies. On each table an "X" was marked in the Total Social/Emotional Development Domain and Language/Communication Domain objectives found in Reading and Social Studies column if evident within the scope and sequence document.

For analyses of the PPCD lesson plans two tables were formulated for each month, one for Reading and the other for Social Studies/Science. Each table included both the Social/Emotional Development and Language/Communication Domain within. Regarding PPCD scope and sequence, the following were of interest to the researcher: (a) total activities in the lesson plan for each subject, (b) number of activities with instructional objectives aligned with the Texas Prekindergarten Guidelines, (c) number of activities without instructional objectives, (d) number of activities matching in each of the domain skills, and (e) number of activities that did not match either of the domain

skills. The researcher reviewed each of the monthly PPCD scope and sequence lesson plans for Reading and Social Studies/Science. On each table an "X" was marked in the Total activities in the drive column if that objective was evident within the lesson plans. After the prekindergarten and PPCD analyses were completed, Tables 2 and 3 were generated for Reading and Social Studies/Science in order to cross match the objectives over-lapping across both programs.

Professional Development Logs. The first log for analysis was the spreadsheet with the courses offered to the prekindergarten staff by the Early Childhood Coordinator and peer facilitator team. The courses were sorted by alphabetical order of the title in a second spreadsheet tab. The titles were analyzed to match spacing, quotation marks, and abbreviations for appropriate grouping. A third spreadsheet tab was created once the data was grouped and sorted in order to remove the courses that occurred after hours or were specific for peer facilitators excluding most of the prekindergarten team. There were three exceptions to after hour courses added back in for coding: (a) Prekindergarten Fish Camp, (b) PreK Power Hour – Let's Move, and (c) Wee-ones Writing Wednesdays. The reason for the exception was that these three courses were identified as completed by several teachers on the second custom log that was provided by the school district. Each course on the professional development log received a letter code. Based on the third spreadsheet, in total there were 154 different courses coded which were offered to the prekindergarten staff by the Early Childhood Coordinator and peer facilitator team. Of those 154 courses, 55 courses did not receive a code and were excluded due to being after hours and no crossmatch was identified on the second log provided by the school district.

A total of 99 courses received a letter code for courses which were offered to the prekindergarten team.

The investigator analyzed an additional professional development custom log with courses completed by prekindergarten teachers in the areas of elementary and special education, which the district sent over categorized by teacher. A second tab on the spreadsheet was created to sort by course title. The same procedure for cleaning the data were applied (i.e., match spacing, quotation marks, and abbreviations) as with the first log. In total 156 courses were coded with a number on the custom log.

Teacher Survey. The teacher survey was distributed using Survey Monkey, an online survey instrument, with University of Houston Institutional Review Board (IRB) approval. The explanatory paragraph of the survey summarizes the purpose of the data collection for this study with the assurance of confidentiality and can be referenced in Appendix B. The school district Deputy Superintendent of Academic Achievement granted permission for the investigator to briefly introduce the survey to the prekindergarten teachers during a back to school professional development in-service. Prior to the completion of the actual survey, participants were required to acknowledge implied consent via the first response item. The school district facilitated the dissemination of the survey link by providing the researcher with district emails for all prekindergarten teachers. As stated in the explanatory paragraph, the survey was deactivated after 10 business days.

In order to derive statistical analyses, the survey results were exported by individual responses for all questions from Survey Monkey to an Excel spreadsheet. Based on condensed values categorical coding was completed for most survey questions.

For example, question 3 in regard to the highest degree completed was assigned a numerical value of '1' for Bachelor's Degree and a '2' for Master's Degree. The type of teaching certificate was also divided into two groups, '1' titled Generalist included: Generalist (EC-6/EC-4), Special Education (EC-12), Special Education Supplemental, English as a Second Language/Generalist (EC-6), Teacher of the Young, and Early Childhood Education; and '2' titled Bilingual included: Bilingual Generalist and Bilingual Supplement (EC-4).

In an effort to determine general experience and a further breakdown of specific years of experience on the outcome, two categories were formed from this one question. For example, question 5 indicated total years of teaching experience and was coded in two different methods for varying types of analyses later in the study. The first condition for question 5 was divided into two groups, Group One: 0-10 years of experience, and Group Two: over 10 years of experience. The second condition was divided into six different groups using a more finite coding for years of experience, 0-1 year, 1-3 years, 3-5 years, 5-10 years, 10-15 years, and 15+ years. Question 6, years of prekindergarten teaching experience, was also coded in two different methods for varying types of analyses later in the study. The first condition was divided into two groups, Group One: 0-5 years of experience and Group Two: over 5 years of experience. The second condition was divided into six different groups using a more finite coding for years of experience in prekindergarten, 0-1 year, 1-3 years, 3-5 years, 5-10 years, 10-15 years, and 15+ years. Question 7, years of teaching experience in inclusive settings, was also coded in two different methods for varying types of analyses later in the study. The first condition for question 7 was divided into two groups, Group One: 0-5 years of

experience, and Group Two: over 5 years of experience. The second condition was divided into six different groups 0-1 year, 1-3 years, 3-5 years, 5-10 years, 10-15 years, and 15+ years.

Question 8 in which teachers had to approximate the number of special education students in their teaching career was collapsed into seven groups, (1) no students, (2) 1-10 students, (3) 11-30 students, (4) 31-50 students, (5) 51-75 students, (6) 76-100 students, and (7) over 100 students. Question 9 in which teachers had to approximate the number of special education PPCD students which a label of AU that had participated in their general education classrooms during their teaching career was collapsed into six groups, (1) no students, (2) 1-5 students, (3) 6-10 students, (4) 11-20 students, (5) 20-30 students, and (6) over 31 students.

For the statistical analyses of survey questions 11-29 responses were collapsed from five categories (i.e., strongly disagree, disagree, neutral, agree, and strongly agree) down to three categories. The categories of strongly disagree and disagree were collapsed into one group, as well as the strongly agree and agree into another group. The responses for Question 30, teacher emails, were deleted from the spreadsheet immediately after two winners were randomly selected by the graduate advisor of this study.

Data Analysis

Question 1. The data for the first research question was analyzed by examining the frequency distribution of bilingual and English-only students with ASD provided by the central city – suburban school district as discussed in the procedure section.

Question 2. The data for the second research question was an item crossmatch between the prekindergarten and PPCD curriculum in the areas of Reading and Social Studies. Thus, the data were analyzed by plotting the objectives from the Texas Prekindergarten Guidelines onto the PPCD and prekindergarten curricula.

Question 3. The data for the third research question was a crossmatch of the professional development courses completed by the prekindergarten teachers with keywords of elementary and special education. The data were analyzed by first coding the professional development log and the customized log using the titles on the logs. Next, the codes were matched between the two logs and finally the cross match was analyzed by frequency.

Question 4. The data for the fourth research question was analyzed via non-parametric, Pearson chi-square, and parametric measures, independent sample *t* test. Pearson chi-square with variables of if the teacher received professional development on their own initiative or through a school initiative (i.e., current or past) were compared to (a) overall years of teaching experience, (b) prekindergarten experience, (c) experience with inclusive settings, and (d) type of teacher certificate. Additionally, *t* tests were conducted to analyze the three main sections of questions (i.e., social/emotional, language/communication, and pedagogy) and compare to the (a) type of teaching certificate, and (b) overall years of prekindergarten teaching experience.

Chapter IV

Results

The investigator of the current study collected data for the purpose of (1) conducting a review the extent of the challenge within a central city-suburban school district of the enrollment of identified students with autism spectrum disorder (ASD), (2) analyzing the bilingual prekindergarten and Preschool Program for Children with Disabilities (PPCD) scope and sequence as it compared to the 2015 Texas Prekindergarten Guidelines, (3) examining the types of professional development opportunities provided to a prekindergarten team since 2014 to the present, and (4) surveying prekindergarten teachers regarding the quality of the professional development opportunities they have completed.

Research Question 1

The school district provided enrollment data for students with a label of autism (AU) for the 2015-2016 academic year to the present 2019-2020. The breakdown of the total number of students with the label of autism (AU) over the past five school years provided by the school district is illustrated in Figure 8.

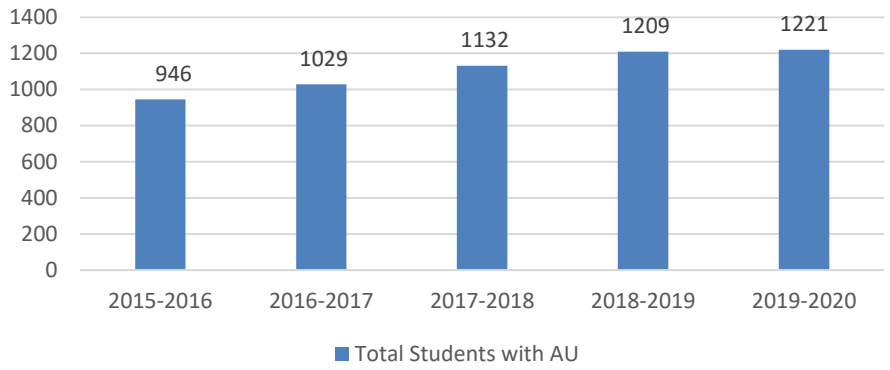

Figure 8. District trends of enrollment from 2015 to the present of students with label of AU.

From 2015-2016 to the present 2019-2020 school year there was a 29% increase in the number of students with the label of AU within the district. The IBM SPSS chart output for the frequency distribution of the data is summarized below in Figure 9.

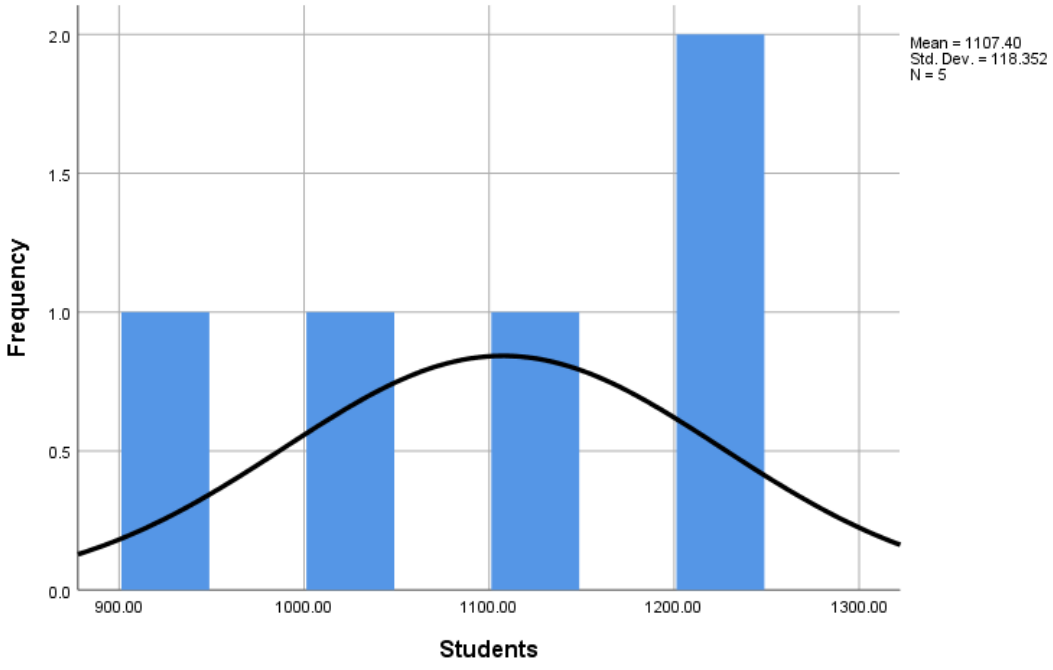

Figure 9. Histogram of frequency distribution of district AU label from 2015-2020.

Furthermore, of primary interest to this study are the number of students with the label of AU whose primary language on the home survey was listed as Spanish. Figure 10 shows district data from 2017 to the present school year.

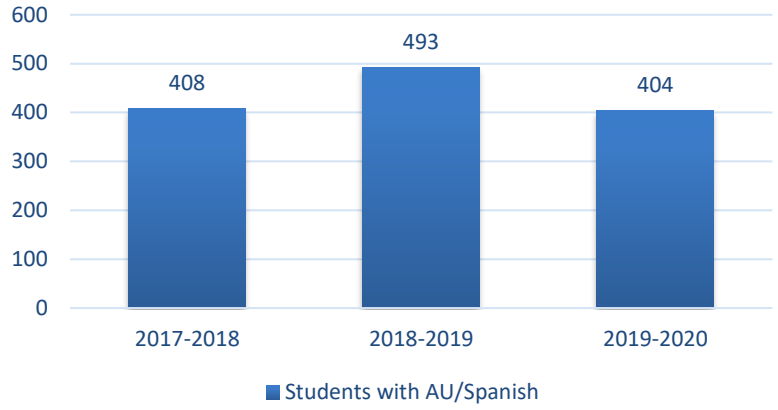

Figure 10. District data from 2017 to the present of students with AU and Spanish as the home language.

It should be noted that Figure 10 above does not contain data for the 2015-2016 or 2016-2017 academic year. The school district did not provide data for those academic years for students with AU and Spanish as the home language. In Figure 11 below, the IBM SPSS chart output for the frequency distribution of the data is summarized.

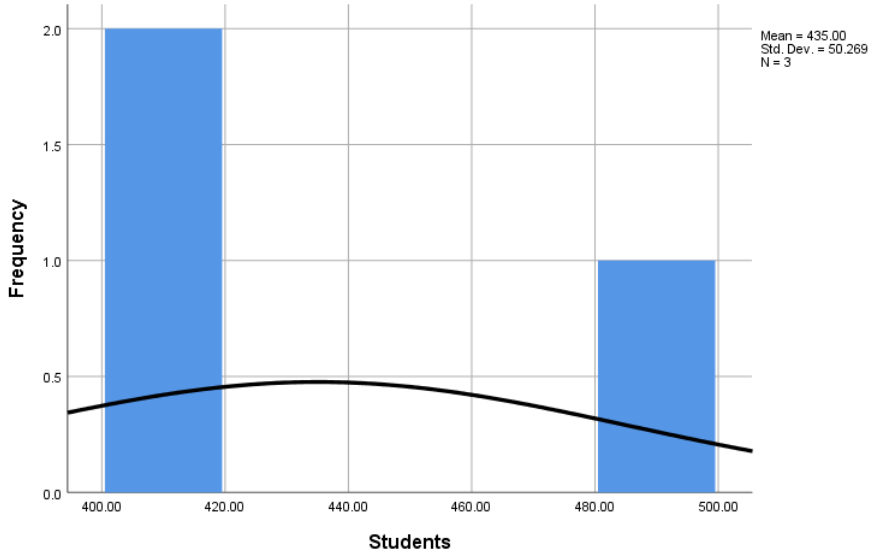

Figure 11. Histogram of frequency distribution of district AU label for Spanish-speakers from 2017-2020.

Research Question 2

Analyses of the prekindergarten and PPCD curriculum maps revealed there was no crossmatch for any of the 20 social/emotional domain objectives in the area of reading. For the 26 language/communication domain objectives, five (19%) overlapped in the area of reading. The language/communication domain objectives that overlapped were as follows (a) child shows understanding by responding appropriately, (b) child is able to use language for different purposes, (c) child uses a wide variety of words to label and describe people, places, things, and actions, (d) child demonstrates understanding of terms used in the instructional language of the classroom, and (e) child increases listening vocabulary and begins to develop vocabulary of object names and common phrases. Table 2 provides the list of matches between the Texas Prekindergarten Guidelines objectives and the PPCD and prekindergarten curriculum in the area of reading. The full table can be found in Appendix D.

Table 2.

Crossmatch of Social/Emotional Development and Language/Communication Domain objectives with reading

Objectives	PPCD	PK
II.A.1.	Y	Y
II.B.1.	Y	Y
II.D.1.	Y	Y
II.D.2.	Y	Y
II.D.5	Y	Y

For the area of social studies, three objectives (15%) in the social/emotional domain were a crossmatch and no matches were identified for the language/communication domain. The three objectives that were a crossmatch were as follows (a) child follows classroom rules and routines with occasional reminders, (b) child takes care of and manages classroom materials, and (c) child regulates his own behavior with occasional reminders or assistance from teacher. Table 3 provides the list of matches between the Texas Prekindergarten Guidelines and the PPCD and prekindergarten curriculum in the area of social studies. The full table can be found in Appendix D.

Table 3.

Crossmatch of Social/Emotional Development and Language/Communication Domain objectives with social studies

Objectives	PPCD	PK
I.B.1.a.	Y	Y
I.B.1.b.	Y	Y
I.B.1.c.	Y	Y

Completed curriculum maps for monthly PPCD lesson plans and each of the four, nine-week grading periods for prekindergarten in the areas of reading and social studies can be reviewed in Appendix C.

Research Question 3

Analyses of the professional development log specific to courses offered to the prekindergarten staff by the Early Childhood Coordinator and peer facilitator team revealed that of the 154 courses, 80 were identified by the investigator in the area of reading instruction and eight in the area of social studies instruction. Additionally, the course log for the crossmatch of elementary and special education courses completed by the prekindergarten teachers indicated that 10 courses aligned with these crossmatched courses. Table 4 below contains the list of courses by title and number of prekindergarten teachers in attendance. Based on the course titles the investigator identified that five courses were content specific to reading instruction (items in bold on Table 4) and none in the area of social studies instruction.

Table 4.

Crossmatch of courses attended by prekindergarten teachers with keywords elementary and special education

Course title	Number of teachers in attendance
Analyzing Running Records PK-4	6
Elementary Guided Reading for Transitional Readers (J-N)	4
Focus on Reading & Writing PK	41
PK Fish Camp	8
PK Power Hour- Let's Move	19
Second Grade Report Card Training	2
Second Nine Weeks Planning Meeting	3
Second Nine Weeks Reading Cohort Campus Pull-Out	5
Shared Reading for Reader's Workshop (PK-1)	15
Wee-Ones Writing Wednesday	81

Research Question 4

The first section of the teacher survey gathered demographic information via nine questions (see Appendix B). For teacher certification type, of the 66 teachers who completed the survey 50% were classified as Generalist EC-4/EC-6, 35% as Bilingual Generalist EC-4/EC-6, 9% English as a Second Language/Generalist EC-6, and the remainder 6% were either Special Education EC-12, Special Education Supplemental, or other. The highest degree completed by 83% of the participants was a Bachelor's Degree and 17% reported having a Master's Degree. Figures 12-14 display overall years of teaching experience, specific prekindergarten experience, and experience teaching in inclusive settings.

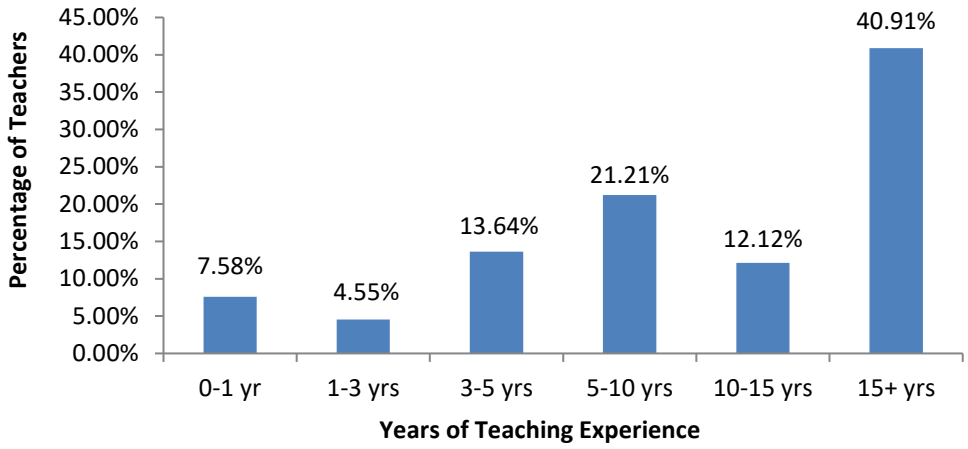

Figure 12. Cumulative years of teaching experience.

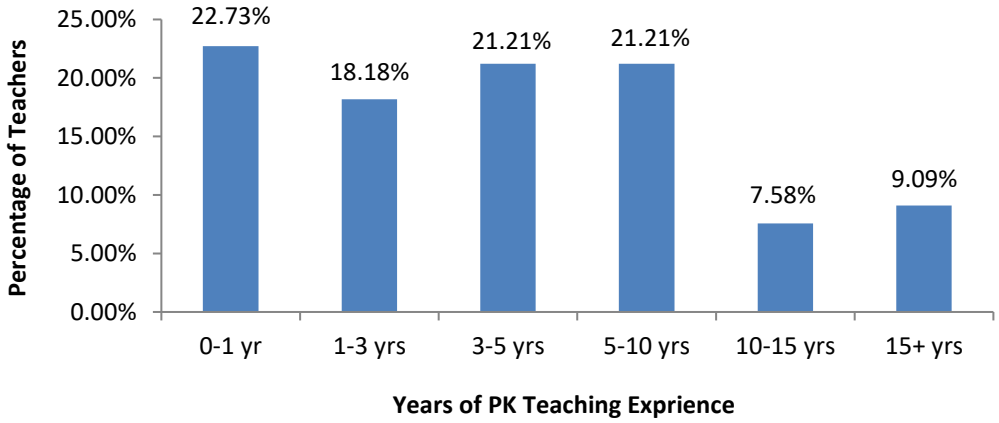

Figure 13. Total years of prekindergarten teaching experience.

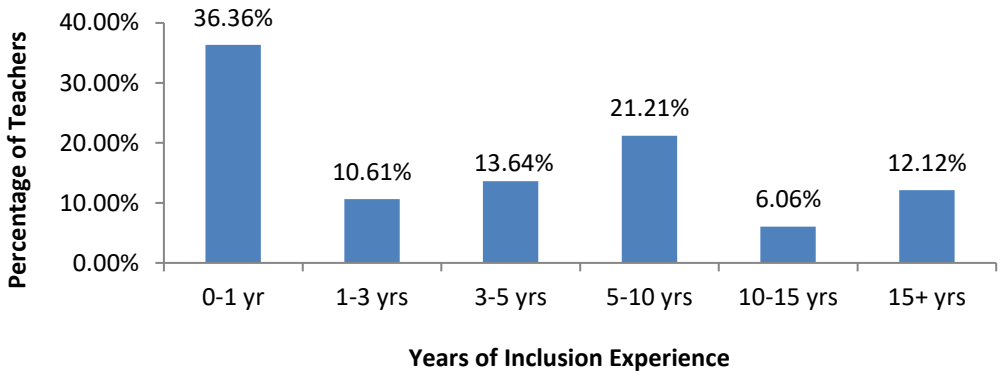

Figure 14. Teacher report of years of experience with inclusive classrooms.

On survey questions 8 and 9, teachers had to approximate the total number of special education students in their career, and number of students with a label of AU who have participated in inclusion within their classrooms respectively. Figures 15-16 illustrate the data for these questions.

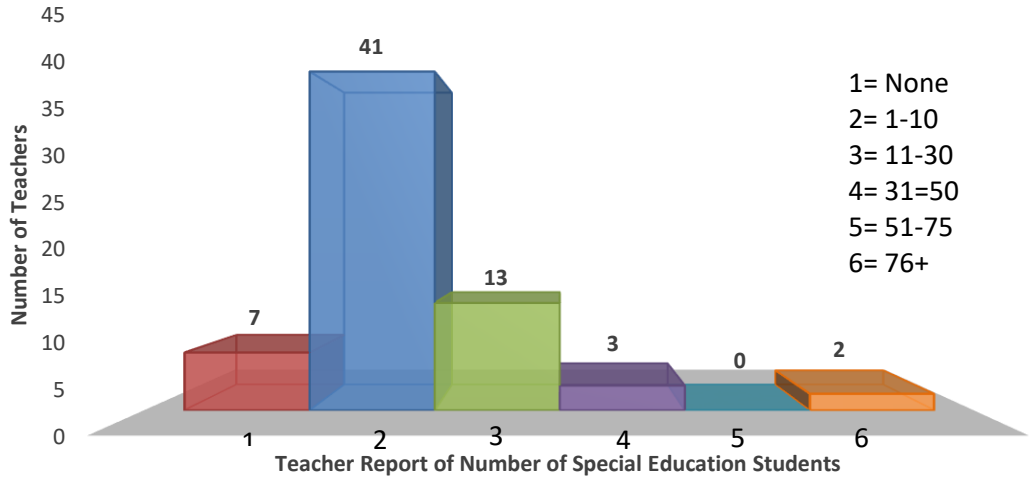

Figure 15. Approximate number of special education students during teaching career.

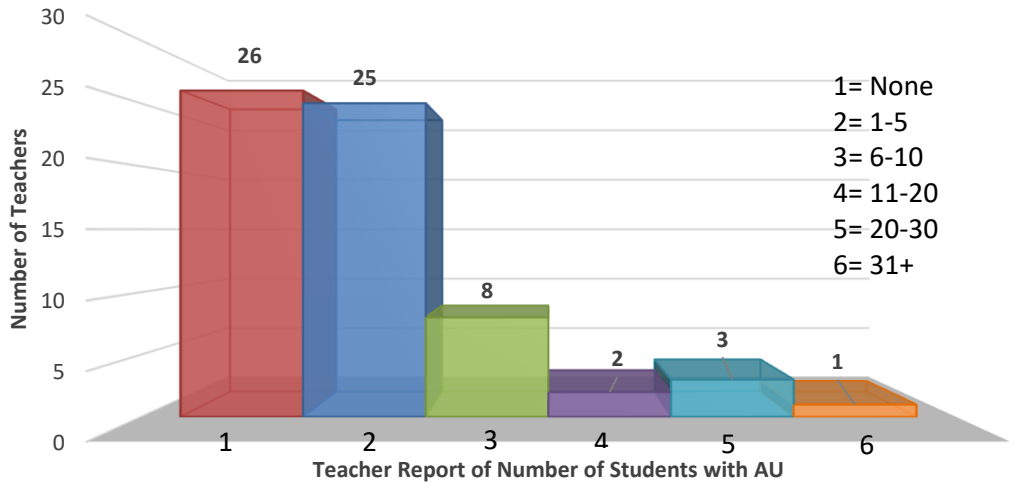

Figure 16. Approximate number of students with ASD during teaching career in inclusion.

Question 10 was designed to obtain information regarding teacher's knowledge of the specialized academic classrooms on their respective campuses. While the teachers were provided with three options that are consistent with the scope of the study, some teachers did not mark those choices, but instead wrote them in the "Other" box that was provided. When a response in the "Other" box was the same response as found on the list of choices, the response was tallied under the appropriate category. The results that were not relevant to the scope of this study were left as "Other." The results were as follows: 12 Learning Experiences and Alternative Program for Preschoolers and Their Parents (LEAP) classrooms, 27 PPCD classrooms, 5 Special Prekindergarten classrooms, 11 other, and 11 none/uncertain.

In order to determine if a teacher received professional development on their own initiative or through a school initiative, four questions (11, 13, 14, and 15) were asked. In regard to university pre-service training, 37% of the teachers 'agreed' they received professional development training specifically addressing students with disabilities, 27%

were neutral, and 36% of the teachers ‘disagreed.’ Also, of interest was if the teachers received training via previous school district employment; the teachers reported 40% for ‘agree,’ 24% were ‘neutral,’ and 36% ‘disagreed.’ Overall 50% of the teachers reported ‘agree’ for having received professional development training specifically addressing students with disabilities in the current school district, 23% were ‘neutral,’ and 27% ‘disagreed.’ Data indicated that 41% of teachers surveyed attended professional development training specifically addressing students with disabilities on their own, 29% responded ‘neutral,’ and 30% responded ‘disagree.’

For the remainder of the survey questions, the responses are ordered by topic and the data are presented in the tables below. First is the social/emotional development domain, followed by the language/communication domain, and finally the teaching pedagogy.

Table 5.

Section II teacher responses for social/emotional survey questions

Survey Question	Disagree	Neutral	Agree
I received professional development training to assist special education students in generalization during inclusive opportunities in the area of social and emotional development with the **skill of self-concept**.	35%	27%	38%
I received professional development training to assist special education students in generalization during inclusive opportunities in the area of social and emotional development with the **skill of self-regulation** (behavior, emotional, and control of attention).	28%	27%	45%
I received professional development training to assist special education students in generalization during inclusive opportunities in the area of social and emotional development with the **skill of relationships with others**.	32%	27%	41%

I received professional development training to assist special education students in generalization during inclusive opportunities in the area of social and emotional development with the **skill of social awareness**.	32%	33%	35%

Table 6.

Section II teacher responses for language/communication survey questions

Survey Questions	Disagree	Neutral	Agree
I have received professional development training to assist special education students in generalization during inclusive opportunities in the area of language and communication **with listening comprehension skills**.	38%	30%	32%
I have received professional development training to assist special education students in generalization during inclusive opportunities in the area of language and communication **with conversational skills**.	34%	33%	33%
I have received professional development training to assist special education students in generalization during inclusive opportunities in the area of language and communication **with speech production skills**.	50%	29%	21%
I have received professional development training to assist special education students in generalization during inclusive opportunities in the area of language and communication **with vocabulary development skills**.	43%	24%	33%
I have received professional development training to assist special education students in generalization during inclusive opportunities in the area of language and communication **with sentences and structure skills**.	47%	31%	22%

Table 7.

Section II teacher responses for pedagogy survey questions

Survey Questions	Disagree	Neutral	Agree
I have received professional development training to adequately determine the necessary accommodations for a broadly defined range of special education students to access general education curriculum.	37%	33%	30%
I have received specific professional development training for the inclusion specifically related to students with Autism Spectrum Disorder into the general education classroom.	56%	21%	23%
I have received specific professional development in universal design for learning (UDL), in respect to environmental modifications.	54%	24%	22%
I have received specific professional development in universal design for learning (UDL), in respect to instructional tools and strategies.	55%	24%	21%

Data Analysis for the Teacher Survey. Pearson chi-squared tests were performed to examine the relation between two variables. Three significant relationships between variables were evident. The first was receiving professional development training specifically addressing students with disabilities at the current school district and type of teaching certificate (i.e., generalist versus bilingual generalist). The relation between these variables was significant, X^2 (2, N = 66) = .009, $p < .05$. The second significant relationship was having attended professional development training specifically addressing students with disabilities on their own and overall years of teaching experience as defined by condition one in the procedures section, X^2(2, N = 66) = .047, $p < .05$. Additionally, there was a significant relationship between having attended professional development training specifically addressing students with

disabilities on their own and years of prekindergarten teaching experience as defined by condition one in the procedures section, $X^2(2, N = 66) = .008$, $p < .05$.

Table 8 illustrates the significant and insignificant Pearson chi-squared test results when $p < 0.05$. IBM SPSS data output for all chi-square test results can be viewed in Appendix E.

Table 8.

Pearson chi-squared (X^2) test results for teacher survey

Variable	Variable	X^2	df	*p* value
PDT at school	Teaching certificate	9.410	2	.009
PDT at school	Total teaching experience	1.537	2	.464*
PDT at school	PreK teaching experience	1.717	2	.424*
PDT at school	Teaching experience in inclusion	1.015	2	.602*
PDT on teacher's own time	Total teaching experience	6.111	2	.047
PDT on teacher's own time	PreK teaching experience	9.617	2	.008
PDT on teacher's own time	Teaching experience in inclusion	5.054	2	.080*

Note: * Denotes an insignificant X^2 relationship at $p < 0.05$; df= degrees of freedom; PDT= professional development training; PreK = prekindergarten.

Additionally, independent sample *t*-test analyses were completed in order to compare means between two groups. An independent-samples *t*-test was conducted to compare the sum of answers of questions related to the social/emotional domain (i.e., questions 17-20) and type of teaching certificate (generalist vs. bilingual generalist). There was a significant difference in the social/emotional domain questions between generalist ($M = 8.53$, $SD = 3.07$) and bilingual generalist ($M = 7.91$, $SD = 2.64$) conditions; t (51.154) = .860, $p = .394$. These results suggest that the mean for training

received in the area of social/emotional domain were different between generalist versus bilingual generalist teachers. A *t*-test for the questions related to the language/communication domain (i.e., questions 21-25) and type of teaching certificate (generalist vs. bilingual generalist) were also compared. There were no significant differences in the language/communication domain questions between generalist (M = 9.47, SD = 3.56) and bilingual generalist (M = 9.04, SD = 3.62) conditions; t (64) = .456, p = .650. These results suggest that training received in the area of language/communication domain were no different between generalist versus bilingual generalist teachers. Finally, a *t*-test for the questions related to pedagogy (i.e., questions 26-29) and type of teaching certificate (generalist vs. bilingual generalist) were also compared. There were no significant differences in the language/communication domain questions between generalist (M = 7.02, SD = 2.874) and bilingual generalist (M = 6.91, SD = 2.592) conditions; t (64) = .153, p = .879. An independent analysis of the bilingual teachers could not be completed given the small sample size. These results suggest that training received in the area of teaching pedagogy were no different between generalist versus bilingual generalist teachers. In conclusion, there was a variance between social/emotional development training and type of teacher certification, but not for the other two sections (i.e., language/communication, or pedagogy).

The investigator was also interested in determining if there was statistical significance between the three sections (i.e., social/emotional, language/communication, or pedagogy) of questions and total years of prekindergarten teaching experience. A *t*-test was conducted to compare the sum of answers of questions related to the social/emotional domain (i.e., questions 17-20) and years of prekindergarten teaching

experience, condition 1 (i.e., 0-5 years and 5+ years). There was no significant differences in the social/emotional domain questions between teachers with 0-5 years of teaching experience (M = 8.12, SD = 3.092) and teachers with more than 5 years of teaching experience (M = 8.64, SD = 2.644) conditions; t (64) = -.696, p = .489. These results suggest that training received in the area of social/emotional domain is no different between teachers with 0-5 years of experience and those with more than 5 years of teaching experience. Next the language/communication domain questions (i.e., 21-25) and years of prekindergarten teaching experience, condition 1 (i.e., 0-5 years and 5+ years) were compared with a t-test. There was no significant differences in the language/communication domain questions between teachers with 0-5 years of teaching experience (M = 8.71, SD = 3.58) and teachers with more than 5 years of teaching experience (M = 10.32, SD = 3.35) conditions; t (64) = -1.818, p = .074. These results suggest that training received in the area of language/communication domain is no different between teachers with 0-5 years of experience and those with more than 5 years of teaching experience. Finally, a t-test for the questions related to pedagogy (i.e., questions 26-29) and years of prekindergarten teaching experience, condition 1 (i.e., 0-5 years and 5+ years) were also compared. There was no significant differences in the pedagogy domain questions between teachers with 0-5 years of teaching experience (M = 6.44, SD = 2.73) and teachers with more than 5 years of teaching experience (M = 7.88, SD = 2.62) conditions; t (64) = -2.112, p = .039. In conclusion, there was no evidence that variances were not equal for any of the three sections (i.e., social/emotional, language/communication, or pedagogy) based on years of prekindergarten teaching

experience, none of the *t*-test results in these comparisons of means were statistically significant. The findings presented in this chapter will be discussed in Chapter V.

Chapter V

Discussion

The problem of practice for this study is to examine the fusion of curriculum between prekindergarten and Preschool Programs for Children with Disabilities (PPCD) as it aligns with the Texas Prekindergarten Guidelines. Furthermore, of interest is the integration of teacher capacity to instruct the needs of bilingual children with autism spectrum disorders (ASD) for the highest student outcomes attainable in the least restrictive environment (LRE). The following is a discussion of the results of each research questions presented in Chapter IV.

Research Question 1

The Texas Council on Autism and Pervasive Developmental Disorders 2016 Report cited ASD, "occurs in all racial, ethnic, and socioeconomic groups" and "it is the fastest growing serious developmental disability in the United States" (Texas Council on Autism & Pervasive Developmental Disorders, 2016, p.6). The Texas Education Agency (TEA) special education Public Education Information Management System (PEIMS) data indicated that statewide in all Texas public school districts including charter schools during the 2018-2019 school year, 71,951 students were labeled with Autism (AU) and 7,553 students with Non-Categorical Early Childhood (NCEC). This is an increase from the 2015-2016 academic year of 54, 098 students with AU label, and 5,475 students with NCEC label. Over those four academic years, it was a 29% increase for AU label and 38% for NCEC label statewide. Figure 17 below indicates the same academic years for Harris County, Region 4, in which the current study's school district is located within (TEA Special Education Reports, 2015-2016 & 2018-2019).

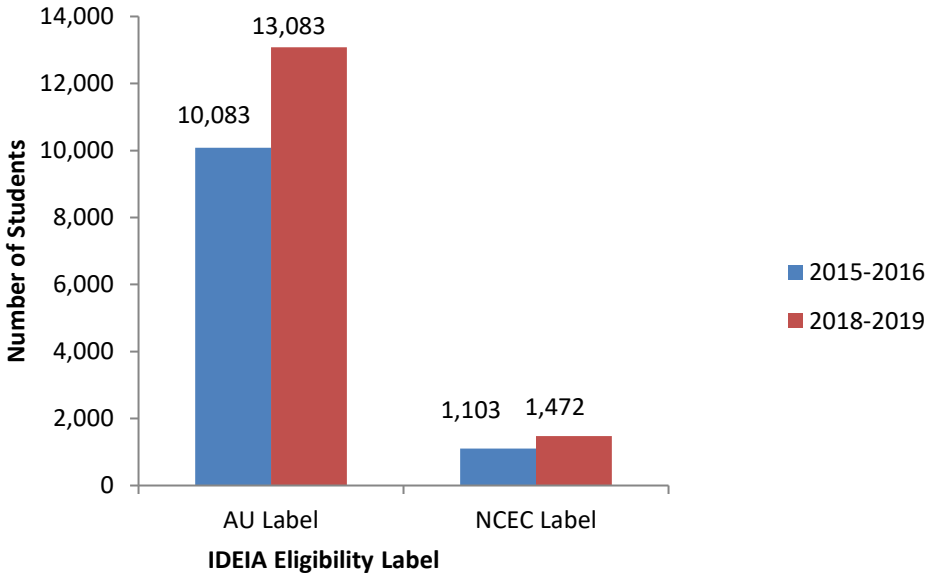

Figure 17. Region 4, 2015-2016 & 2018-2019 AU and NCEC statistics.

Moreover, Region 4 data indicated a 29% increase for the students labeled with AU and 33% increase for those labeled NCEC. Similarly, the data from the central city - suburban school district in this study indicated a 29% increase over the last four academic school years in the number of students with a label of AU. The mean over the previous four academic years was calculated as 1, 107 students with a standard deviation of 118. The percentage calculations for this central city – suburban school district were assumed a reliable statistic, as they appeared congruent with state and regional data.

Limitations for research question 1 were that the investigator was interested in the analyses of how many students in the particular district have been identified as English Learners (ELs) and also had a label of AU; however, data for two academic years (i.e., 2015-2016 and 2016-2017) were not provided by the school district. The percent increase over the last four academic years was not derived for this reason. Moreover, trends could not be determined based on the investigator's inability to track students across multiple years. The school district provided specific ages for each of the 404

students with AU for only the current academic year 2019-2020; therefore, trends over the last five years could also not be determined. Finally, there was no comparison of data for the mean and standard deviation; for this reason, those calculations were only reported.

Severity data is often a request when viewing a disability; however, the severity of the student's disability, especially ASD, is not a regular part of any public-school district's evaluation process nor is that component required by law. However, there is a coding system from the state that is based on percent of time a student spends in a particular classroom setting. Instruction is modified accordingly by educators to meet the individual needs of students. Just as in a clinical setting, severity could assist educators with academic programming and preparation when reviewing school records for change of school, out-of-district school transfers, and educational placement determinations. It could also help in tracking progress throughout a student's educational track. While complex in nature, continuing to lobby to formally define inclusion within the Individuals with Disabilities Education Improvement Act (IDEIA), would thereby bring consideration to the benefits of formulating standardized severity indicators.

Research Question 2

The general education curriculum literature supports the idea that when grade-level standards are consistently aligned, students demonstrate adequate progress during opportunities to learn (Taub, McCord, & Ryndak, 2017). One of the dependent variables of this study is the alignment of the curriculum between the Texas Prekindergarten Guidelines within the bilingual program and the PPCD scope and sequence. Taub et al. (2017) posited that "*intended* curriculum leads to *planned* curriculum, which leads to

enacted curriculum" (p. 128). The intended curriculum was defined as the state standards of the student knowledge in each specific grade level, while the planned curriculum was explained as the actual delivery or teacher interpretation of the intended curriculum. The enacted curriculum is the collective teaching practices that take place within the classroom during opportunities to learn the planned curriculum (Taub et al., 2017).

Moreover, the independent variables are the Texas Prekindergarten Guidelines implemented within a bilingual classroom and the PPCD scope and sequence. The 2015 Texas Prekindergarten Guidelines were adopted by the state and outlined earlier in this chapter. The PPCD scope and sequence are specific to the central city – suburban school district utilized for this study and carefully analyzed during the curriculum mapping portion of this study. The materials used for this study generally do not vary from year to year, except for a few new activities added. The state domains/objectives do not change unless there is a change in the Texas Prekindergarten Guidelines from TEA.

A review of both sets of scope and sequence for the programs of interest to this study revealed that the areas of reading and social studies were not sufficiently or purposefully aligned with each other. Specifically, for the PPCD scope and sequence, in the area of reading 35% (N = 7) social/emotional development domain and 19% (N = 5) language/communication domain objectives were present. For the prekindergarten scope and sequence, in the area of reading 0% social/emotional development domain and 100% (N = 26) language/communication domain objectives were present. For the PPCD scope and sequence, in the area of social studies 25% (N=5) social/emotional development domain and 15% (N = 4) language/communication domain objectives were present. For the prekindergarten scope and sequence, in the area of social studies 25% (N = 5)

social/emotional development domain and 0 % language/communication domain objectives were present.

General observations during the analyses of the scope and sequence indicated that prekindergarten organizes their document bundles per nine-week increments and PPCD every month. Perhaps both programs should align documents in nine-week increments so that there can be a shared timeframe to target the Texas Prekindergarten Guidelines objectives. Also noted was that the prekindergarten scope and sequence was outlined with higher specificity regarding instructional practices, hands-on activities, suggested resources, and district resources when compared to the PPCD lesson plans. The PPCD SharePoint folder for teachers contains subfolders (i.e., cognitive, fine motor, etc.) with similar content to what appeared on the prekindergarten scope and sequence. However, it was inconsistently referenced within the lesson plans. The PPCD activities reviewed in the SharePoint folder by the investigator appeared meaningful, organized and aligned to the curriculum. It was noted that most, but not all activities outlined instructional objectives, despite the activity covering numerous of the Texas Prekindergarten Guidelines objectives/domains. A helpful feature within some of the PPCD activities was the section titled 'Differentiated Instruction,' in which teachers are provided strategies for at least three tiers of support for students. Finally, it would be beneficial for all teachers to have a link between the documents that specifically indicate assistance for students with Individualized Education Programs (IEPs).

Perhaps collaboration time (e.g., teacher in-service days, teacher planning time., etc.) between programs would be valuable to align the documents and curriculum with more significant reference to the Texas Prekindergarten Guidelines. Common teacher

planning time among PPCD and prekindergarten teachers would be beneficial, as it "allows for structured opportunities for teachers to collaborate about instruction through the use of facilitators, administrators, and formalized processes" (Solis, Vaughn, Swanson & McCulley, 2012, p. 505).

This investigator observed a Learning Experiences and Alternative Program for Preschoolers and Their Parents (LEAP) classroom within the central city – suburban school district referenced in this study. The observation sparked the idea for PPCD and prekindergarten teachers to participate in various co-teaching models of instruction for at least a portion of the school day. Friend (2008) suggested that in moving special education services to a general education setting via co-teaching, students were "ensured access to a highly qualified teacher in the content area, a qualification that remedial specialists, especially special educators, may not possess" (p. 10).

Furthermore, given the rise of bilingual children with autism spectrum disorder (ASD) and the supporting literature presented within Chapter II, it is crucial for school districts to provide bilingual options for special education (i.e., PPCD) and inclusive opportunities (i.e., LEAP and general education). In the data provided by the central city – suburban school district, it indicated that during the 2019-2020 school year, at least 14 students were four- or five- years old whose parents indicated Spanish as a home language and were already identified with ASD. All core subjects are of importance for instructional purposes beginning in prekindergarten; however, socialization and language abilities are the foundation for students to be able to demonstrate mastered objectives and related to others in the school community. It is crucial for school districts to practice cultural and linguistic sensitivity for all students equitably.

Limitations for research question 2 include that the investigator analyzed PPCD lesson plans in which social studies and science were grouped, and the prekindergarten scope and sequence was only for the area of social studies. For prekindergarten, the subject of science was not analyzed in any capacity. It should also be noted that curriculum mapping of other subjects (i.e., math, science, etc.) also need to be considered in future research. Furthermore, analyses of English prekindergarten scope and sequence to compare to the PPCD scope and sequence would also be of benefit for curriculum alignment. Additionally, the prekindergarten nine-week bundles reviewed and PPCD lesson plans are guidance from the Early Childhood Coordinator and PPCD Content Specialist, and may not be reflective of each teacher's lesson plans which may be more robust as far as including social/emotional development and language/communication domain objectives from the Texas Prekindergarten Guidelines. The investigator did not obtain data on whether or not PPCD teachers accessed prekindergarten materials (i.e., district resources, scope and sequence bundles, etc.), and if so, at what frequency.

Research Question 3

The National Staff Development Council (NSDC), currently known as Leaning Forward published Standards for Staff Development (2001) in which it referenced that through effective professional staff development, teachers "understand the general cognitive and social/emotional characteristics of students in order to provide developmentally appropriate curriculum and instruction" (p. 10). As recommended in the document, the leadership of the central city –suburban school district in this study has established a commitment to ensure "policies and organizational structures that support

ongoing professional learning and continuous improvement" (p. 2) is part of the organizational structure on an ongoing basis.

Based on the 154 courses coded by the investigator, as explained in Chapter III, the prekindergarten Early Childhood Coordinator and peer facilitator team offered approximately 52% of courses in the area of reading and 5% of courses in the area of social studies to the prekindergarten teachers. Those percentages were calculated due to their relevance for this study in terms of the curriculum mapping portion. The investigator identified two out of the 154 courses (i.e., PreK Power Hour- Helping Children with Difficult Behaviors and PreK Power Hour Plus- Creating Classroom Community) as possibly being specifically related to the social/emotional development of students. Furthermore, according to the custom log data, a crossmatch of courses with keywords of elementary and special education indicated a total of 184 prekindergarten teachers participated in ten of those courses since the 2014-2015 academic year.

The gaps discussed earlier in the curriculum mapping portion of this study regarding social/emotional development, and language/communication domains appear to align with the data on the prekindergarten professional staff development logs. For school districts to meet the demands due to the increase of students with ASD in inclusive settings, it is essential for courses to focus on core subjects. Professional staff development must also align with supporting constructive interactions and fostering the students' ability for self-management (NSDC Standards for Staff Development, 2001, p. 10). Perhaps a solution for the school district would be to create PreK Power Hours with specific content to address the needs of students with ASD. A different perspective to the prekindergarten team could be initiated via the instruction of these courses through

support and special education professionals (i.e., school counselors, speech-language pathologists, licensed school psychologists, PPCD teachers, etc.) or out-of-district consultants/coaches. A reference for evidence-based topics for future professional development that benefit children with ASD is The National Professional Development Center on Autism Spectrum Disorders (NPRSC, n.d.).

Limitations for research question 3 included that the investigator did not have data available to identify if a current prekindergarten teacher taught a different grade level during previous school years. This would have an impact on the reported professional development attendance over the last four years of their careers. Furthermore, full course descriptions and objectives were not available to the investigator to crossmatch for keywords with social/emotional development and language/communication, which would affect the percentages reported within this section of the study. Some of the prekindergarten reading courses probably offered aligned with at least the language/communication Texas Prekindergarten Guidelines objectives.

Research Question 4

The dependent variable of research question 4 is the general education teacher's knowledge in regard to inclusive practices to assist in the development of (a) social and emotional skills, (b) language and communication skills, and (c) teaching pedagogy across educational environments for children with ASD who are included into general education. Taub et al. (2017) conceptualized the quality of teaching as including the ability to "interpret the goals and purposes of the intended curriculum and teach students to the level intended by the standards" (p. 129). The corresponding independent variable

is the Likert scale survey formulated for this study. A copy of the survey can be found in Appendix C, and a summary of the results follows.

Demographic information indicated that overall, 41% of the teachers reported more than 15 years of total teaching experience. Collectively, as a group, this prekindergarten team has a significant number of veteran teachers. For years of teaching experience in prekindergarten, the highest number of participants (23%) had less than 1 year of experience, with the second-largest group 3-5 years and 5-10 years with equal totals (21%). An assumption is that the largest group, teachers with less than one year of teaching experience, could probably benefit the most from professional development training to support the social and communication needs of students with ASD during inclusive opportunities. Furthermore, the highest percentage (36%) of teachers reported having less than one year of experience with instruction in inclusive classrooms.

It was of interest to the investigator that 17% of teachers who participated in the survey were either not aware of which specialized programs were available within their campuses or did not have any of these programs on their campus. When teachers were surveyed about the approximate number of special education students in their classrooms over their teaching careers, 62% indicated approximately between one to ten students, and 40% of the participants estimated no children with ASD were ever a part of their general education classroom. Both of these estimates appear to be in line with the 2013 United States Department of Education (USDOE) data, referenced in Chapter II, which indicated over half (53%) of children with disabilities were placed separately from typically developing peers. Furthermore, this data appears to show limitations for generalization of skills across environments for children with ASD.

The survey questions determining if teachers received professional development on their own or through a school initiative indicated that 50% of participants ‘agreed’ to have received training at their current school district and 40% reported they had received training while another school district employed them. Approximately the same percentage of teachers agreed (37%) and disagreed (36%) that their university pre-service program provided professional development specifically addressing students with disabilities. Furthermore, teachers appeared to make a reasonable effort to attend training on their own, as 41% 'agreed' to seeking out these opportunities.

The mean was calculated for the social/emotional questions 17-20, which indicated that the highest percentage of teachers (40%) agreed they had received training in the social areas of self-concept, self-regulation, the skill of relationships with others, and skill of social awareness. For questions 21-25, regarding language/communication, the highest mean (42%) was for the category of 'disagree' to have received specific training in listening comprehension, conversational skills, speech production skills, vocabulary development, and sentence structure skills. Similarly, questions 26-29 received the highest mean (51%) for the category of 'disagree' to having received training in determining the necessary accommodations for a wide range of special education students, inclusive practices specifically related to ASD, and knowledge about universal design for learning (UDL). Overall the prekindergarten teachers felt least comfortable with pedagogy and language/communication when compared to the training they have received to support socialization within their classroom. This survey data aligns with the gaps in the curriculum mapping and professional development logs, in that the majority

of teachers indicated a greater need for evidence-based specialized training for adequate support of inclusive practices targeting the needs of students with ASD.

Pearson chi-square test results indicated three significant relationships between categorical variables; however, due to the small size of the survey according to Field (2013) “approximation is not good enough, making significant tests of the chi-square distribution inaccurate” (p. 723). Just as described by Field (2013), when the investigator tried to compute numerous other chi-square tests, due to some of the expected frequencies being too small with an expected count of less than 5, the “sampling distribution of the test statistic is too deviant from a chi-square distribution to be of any use” (p. 724). A Fisher’s exact test was not conducted as a follow-up, due to the lack of 2x2 contingency tables required for this statistical method. Future research is needed with a larger sample size to determine the nature of the difference and reasons for the three significant relationships found within this study.

T-test data indicated variance between the means of the social/emotional development training and type of teacher certification, but not for the other two sections (i.e., language/communication, or pedagogy) of the survey. The mean (8.53) was higher for the social/emotional development training received for teachers with a generalist certificate when compared to mean (7.91) of the bilingual generalist teachers. This possibly aligns with a higher percentage of 'agree' for the social/emotional development survey questions when compared to language/communication and pedagogy questions. Future research is needed to determine gaps in teacher training for generalist versus bilingual generalist teachers.

One of the limitations for research question 4 was the small sample size, which resulted in chi-square distribution deviances. When numerous other variables were attempted for computation, error warnings indicating the expected count for some cells were less than 5. Thus, those chi-square tests were not reported. Additionally, the survey was comprised of categorical variables, nominal and ordinal, which allowed for only Pearson chi-square and *t*-test analyses. Future researchers may consider wording survey questions with numerical variables (interval or ratio) for a greater variety of statistical analyses to be possible.

Furthermore, consideration must be given to surveying PPCD and LEAP teachers to be able to compare answers between general and special educators. This is especially true, given that the custom professional development log provided by the school district contained PPCD teachers' attendance. Future research should consider examining responses from varying school districts, as only one central city – suburban school district was utilized in the current study. Finally, the investigator was not able to use data from question 12 regarding if the training was received via an alternative certification training program due to the inability to distinguish teachers who attended a pre-service teaching university program versus those who majored in other degree areas.

Conclusion

The results of this study confirmed that within this central city – suburban school district, just as across the state of Texas, students entering public school systems who are labeled with AU are steadily on the rise. Desegregating the statistics for ELs is not as clear cut when also looking at disabilities. The Center for Disease Control and Prevention (CDC) reported that from 2000 to 2010, cases of ASD more than doubled in

children who were eight-years-old in the United States (Baio, Wiggins, Christensen, et al., 2014). The rate of increase for ASD is only expected to continue to grow; for this reason, public school districts across the United States must fuse curriculum and integrate resources for the appropriate and free education of ELs who have a diagnosis of ASD. It is essential to include special education programs such as LEAP and PPCD in vertical and horizontal curriculum alignment with the Texas Prekindergarten Guidelines for inclusive opportunities to be rigorous and relevant for students. Furthermore, school districts must start committing to provide special education programs that support the home language for children with ASD for the transfer of skills to the mainstream language.

School districts across the state of Texas, just as the one utilized for the data in this study, continuously provide a robust list of professional staff development opportunities typically focused on core subjects. Evidence-based techniques/strategies for effective instructional practices must be added to professional development opportunities, to support the rise of not only ELs with ASD but also other groups of students entering with various complicated developmental disabilities and genetic disorders. Teacher capacity appeared the highest with social/emotional development when compared to language/communication and teaching pedagogy (i.e., special education, ASD, and universal design for learning). School districts must bridge this gap in teacher knowledge, considering the importance of age three communication skills for prediction of age five language skills in children with ASD. As suggested by the research base of this study, inclusion needs to be adequately supported (i.e., TEACCH, peer-

mediated social programs, etc.) by all stakeholders, for students with ASD to achieve the highest cognitive, social, language, and adaptive behavior skills attainable.

Ultimately, to make inclusion of students with ASD in general education settings, schools need to ensure that the teacher Professional Development (PD) is inclusive of all teachers. For example, special education teachers should be included in general education trainings and a portion of the training should be devoted to inclusionary practices such as scaffolding instruction, small group instruction, and behavioral interventions. Additionally, schools need to have a section of PD that are required by all teachers to show how skills can be scaffolded to meet the needs of all students in the classroom. This 'must do' list should include behavioral support, language and communication, and accommodations/modifications of curriculum to ensure access for all. Schools can then offer a 'menu of choices' that pertain to specific content area (i.e., reading, writing, social studies, etc.) with the inclusion of generalizing the skills for all students in the classroom.

Chapter VI

Action Plan

Analyses of the curriculum mapping, professional staff development logs, and survey results compelled this investigator first to propose restructuring current systems by developing training for teachers, to support and increase their confidence in providing high-quality inclusive opportunities for children with autism spectrum disorder (ASD). High-quality inclusion was conceptualized by Buysse and Hollingsworth (2009) as "…encompassing both general early childhood recommended practices as well as specialized instructional and intervention strategies to accommodate individual learning needs" (p. 5). In the last decade, several federally funded agencies such as the US Department of Health and Human Services (USDHHS) and the United States Department of Education (USDOE), among others, have published policy statements to assist in the guidance of state education agencies (SEAs) and local education agencies (LEAs) in the restructuring of early childhood programs. During 2016 the USDOE offered non-regulatory guidance for the support of our youngest students to assist state education agencies (SEAs) and local education agencies (LEAs) on the implementation of the Every Students Succeeds Act (ESSA).

The USDOE referenced eight nationally accepted elements, two of which are relevant that serve as a framework for high-quality preschool programs. The first element cited was ensuring LEAs employ highly qualified lead teachers with at least a bachelor's degree in early childhood education or related field. The second element was the provision of "…ongoing practice-based professional learning (or professional development) in early childhood development and mentoring, coaching, or other

professional development consultation for teachers, administrators, and other staff" (p. 6). For a shared reference of the expectations of professional development, the National Professional Development Center on Inclusion's (NPDCI) (2008) definition was accepted for the use of this study, and is as follows:

> Professional development is facilitated teaching and learning experiences that are transactional and designed to support the acquisition of professional knowledge, skills, and dispositions, as well as the application of this knowledge in practice. The key components of professional development include: a) the characteristics and contexts of the learners (i.e., the *who* of professional development including the characteristics and contexts of the learners and the children and families they serve); b) content (i.e., the *what* of professional development; what professionals should know and be able to do; generally defined by professional competencies, standards, and credentials); and c) the organization and facilitation of learning experiences (i.e., the *how* of professional development; the approaches, models or methods used to support self-directed, experientially oriented learning that is highly relevant to practice). (p.3)

As part of this professional staff development program, the investigator selected to include the principles of learning science to prevent the content presented to become an impractical intervention practice that either never achieve implementation or overtime loses its intended purpose.

Improvement Science

Bryk, Gomez, Grunow, and LeMahieu (2015) proposed that before enacting a large scale educational reform, relevant data must be collected while remaining engaged

with the individuals responsible for actually implementing the change. Historically, initiatives that are handed down to school districts for immediate implementation are quite rarely discussed in sensing sessions with the actual team members who will be affected the most. For this reason, Bryk et al. (2015) suggest that key implementation strategies required for success are quite often either entirely overlooked or not accurately executed. Due to the complex nature of effectively including students with ASD in our educational processes, *Improved Science* is posited to identify specific problems, reasons for a change, and anticipated benefits. Highlighted below in Figure 18 are the six core principles of improvement science.

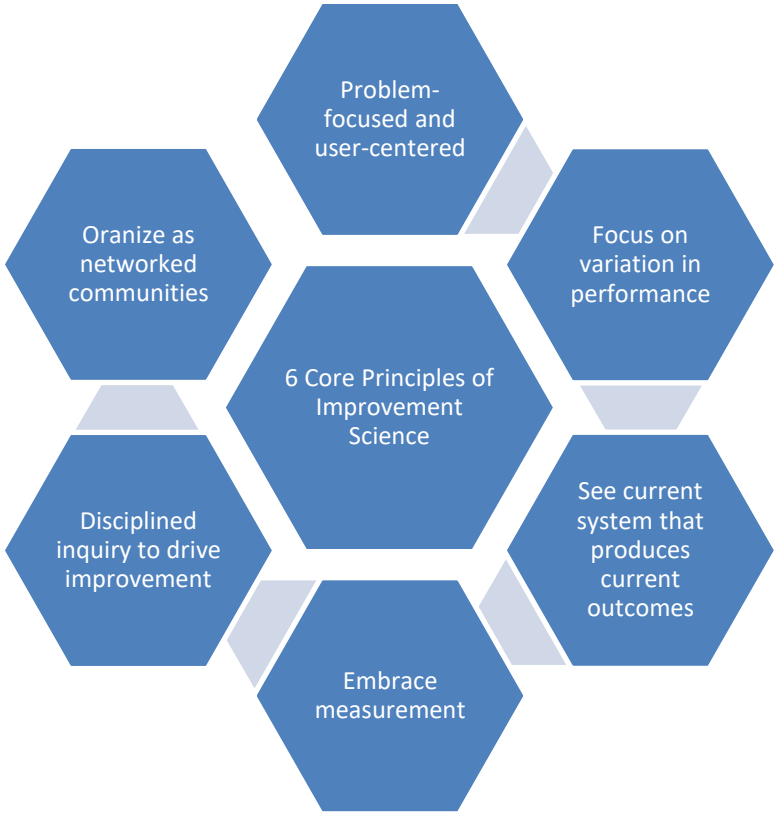

Figure 18. Six improvement science principles based on Bryk et al. (2015).

Bryk et al. (2015) posited that if the intervention benefits are not as great as initially anticipated, the design is modified with the assistance of the implementers in

science networks. The idea is to advance educational processes through research-based evidence, which is modified based on continuous working models for improvement via the guidance of implementers.

Why use improvement science?

The most challenging aspect, as explained by Bryk et al. (2015), is the improvement of the *know-how* for the field of education to build *evidence-based practices* and *practice-based evidence* that aids in the real advancement of the field. Implementing a few principles is not sufficient for structured improvement to not just serve the purpose of a fast and inefficient reform in the effective inclusion of students with ASD.

Bryk et al. (2015) emphasized the importance of beginning the process well by clearly identifying the problem requiring solutions. This requires the organization not to try to jump ahead to *solutionitis*, but instead to critically analyze the systems and players in place contributing to the problem and breakdowns. A safe environment is of importance for crucial conversations to be perceived and accepted as constructive instead of negative criticism. Bryk et al. cautioned improvement science participants to delve deep so that not just one aim is seen as the solution to all of the organization's problems. It is essential for small steps and critical interventions to be implemented systematically so that results can be implemented on a larger scale and ensure they can be reproduced. Once problems are identified via networked communities, it is of importance that immediacy for improvement not plague the organization, which has the opportunity to stall growth. One of the most significant challenges identified by Bryk et al. is that once

solutions are derived via improvement science principles, those implementers have trained in the incorporation of these changes into efficient work processes.

Universal Design for Learning

A complimentary framework for consideration by the district after analyses of the teacher survey results is Universal Design for Learning (UDL). Stockall, Dennis, and Miller (2012) suggested that "UDL focuses on the goals, methods, materials, and assessments of instruction to make them accessible to the maximum number of students possible" (p. 10). According to the authors, there are three main principles of UDL with are as follows: a) multiple means of representation; b) multiple means of expression; and c) multiple means of engagement. For the first principle, educators must ensure that differentiation exists in the language and materials for "…instruction, questions, expectations, and learning opportunities…" (Stockall et al., 2012, p. 11). For the second principle, students must have access to responding in various methods and can determine which materials they want to access to demonstrate their knowledge. Finally, the third principle is for educators to gain the student's attention and motivate them with various "…levels of scaffolding, repetition, and appropriate challenges then maintain engagement to ensure successful learning" (Stockall et al., 2012, p. 11). To summarize, once goals are established for the class, educators must select evidence-based teaching practices, "…in keeping with UDL principles, the teacher can present concepts in multiple ways, offer children multiple means of expression, and provide a variety of options for engagement with learning" (Stockall et al., 2012, p. 12). By utilizing UDL in conjunction with other frameworks referenced above, the student outcomes based on

evidence-based techniques will provide a greater likelihood for the highest developmental level to be attained by each student.

Purpose of Professional Development Training

The purpose of this training is to increase rigor and relevance in the implementation of high-quality inclusive preschool programs. This training is designed for all stakeholders in the early childhood education of children with disabilities and in general education to explore topics in the quantitative measure of inclusive practices, UDL, and overall implementation of specialized protocols/interventions utilized by students with ASD across educational settings. Currently, the expectation is for PPCD students to be included in general education settings; however, what evidence-based supports are we allowing them to bring from their PPCD classes into general education to increase student outcomes?

Materials and Format

After registration, participants will receive an email with pre-workshop materials and links for a review of main topics and specialized evidence-based protocols. For the dissemination of the most updated information to be accessible to all participants, these links and resources will be updated regularly before each training opportunity.

The format for this training program will encompass training videos with Inclusive Classroom Profile (ICP) scoring rubrics, lecture presentations with PowerPoint slides for note-taking, and case studies with hands-on activities for summative activities. The handouts will be a combination of examples of materials (i.e., addition structured task, color match work system, etc.), PowerPoint slides for notes, links to the videos

utilized in class, resources from the NPDCI, ICP scoring protocols, as well as some novel outlines for educators to problem-solve for their individual team needs.

The length of this professional development workshop is anticipated to require at least three days to address the agenda referenced below. The first two days will be proposed for completion during the fall semester to begin the conversation, review the content, and allow for implementation and restructuring over a few months post-workshop. The third day of training is proposed to take place early during the spring semester as a follow-up for questions, problem-solving, and troubleshooting some specific issues across the district.

Content

Agenda.

a) Discuss national, state, and current trends within the school district of inclusive practices in preschool.
b) Examine the results of this study's curriculum maps and teacher surveys.
c) share an understanding among general and special education staff about best practices for children with ASD that are being implemented within the district (e.g., LEAP, TEACCH, PECS, etc.) and around the US.
d) Learn about relevant research that indicates the language development of children with ASD is not further delayed by exposure to bilingual environments.
e) Review learning science concepts and hands-on application for a problem of practice.
f) Discuss and explore how UDL can assist educators in further developing skills in preschoolers.

g) Review the content, administration, and scoring the ICP.

h) Envision how the implications of this study can enrich all students participating in an inclusive setting within a general education classroom.

Implementation

Participants. Relevant audience members for this training are special education PPCD teachers, general education prekindergarten teachers, paraprofessionals who serve in PPCD and prekindergarten classrooms, related service providers (e.g., speech-language pathologists, occupational therapists, licensed specialists in school psychology, etc.), program specialists, and administrators. Paraprofessionals often are part of the support for children with special needs during inclusive settings; for this reason, training needs to be provided to them as a group for assistance with the use of specialized materials/protocols.

Presentation Process. Pre-workshop engagement for participants will be encouraged by requesting that educators, paraprofessionals, related service providers, etc. complete at least one to two observations in a colleague's classroom. This is of particular importance for general education teachers to observe, for instance, TEACCH Structured Teaching being implemented across subjects within a PPCD classroom. The workshop delivery is planned to be a dynamic combination of case studies via participant collaboration on scoring the ICP, lecture on theoretical foundations, and practical applications for participants to problem solve based on evidence-based practices.

Assessment

Formative Assessment. Within the field of early childhood education, a well-accepted evidence base has been collected on the positive correlation between the quality

of a program and the student outcomes associated with participation. One of the areas that have been lacking is a quantitative measurement of the participation of special education students within inclusive preschool classrooms. For this reason, the ICP was selected as the tool for formative assessment utilized during this training program. According to the ICP manual (2016), it is a "…structured observation assessment tool designed to assess the quality of daily inclusive classroom practices that support the developmental needs of children with disabilities in early childhood settings" (p. 1). The target age range of students is between two-and three-years of age. The items on the ICP "…indicate the extent to which classroom practices intentionally adapt the classroom's environment, activities, and instructional supports in ways that encourage access and active participation in the group through adjustments that might differ from child to child" (p.1).

The ICP is comprised of the following 12 items: 1) adaptations of space, materials, and equipment, 2) adult involvement in peer interactions, 3) adults' guidance of children's free-choice activities and play, 4) conflict resolution, 5) membership, 6) relationships between adults and children, 7) support for communication, 8) adaptation of group activities, 9) transitions between activities, 10) feedback, 11) family-professional partnerships, and 12) monitoring children's learning. Each of the 12 items is rated on a 1-7 Likert-scale, with one being the lowest score. Soukakou (2012) explained that the ratings are assigned based on observation of the children with disabilities participating in the general education classroom in a group setting. Furthermore, it was explained that a core difference of the ICP, when compared to other quality measures, is that it does not measure the average performance of all children, but only those with special needs

included in the general education setting. The ICP is administered via direct observations and can be completed in approximately two hours. The ICP has three uses, which were identified by the researcher, a quality assessment tool, a quality improvement tool, or a research tool (Brookes Publishing, 2017). For this training, the ICP will be utilized as a quality improvement tool during the formative assessment process. For example, short video clips will be played for the audience, and they will be asked to rate a few items at a time. These video clips will range on the level of implementation for each item so that the participants can discuss and learn how to discern scoring methods. Throughout the workshop, ongoing feedback after watching video clips and scoring in groups/teams will be provided by the facilitator to the group. Summative. During the last day of training, in teams, participants will view different video clips to allow for all items of the ICP to be scored. In small groups, participants will be given time to problem-solve and suggest adequate changes based on topics covered and deficiencies observed. Results will then be discussed in a large group with the facilitator.

Conclusion

The evidence is converging in the field of early childhood education for the need for high-quality inclusive programs for successful student outcomes for children with ASD in later grades. Soukakou (2016) cited a mismatch in reality faced by professionals in the field serving this population, who have not received adequate preparation in how to adapt their instruction or the curriculum to individualize for children with disabilities. Through the integration of long-standing evidence-based protocols for children with ASD, improvement science principles, and UDL implementation beginning in preschool, policymakers, administrators, and educators can meet the challenge of the necessary

long-term changes for effective classroom practice. Early childhood educators are met with increasing demands for students to achieve higher outcomes in all areas of development. Evidence-based practices need to be fused into professional development programming so that educators can be equipped to meet the demands within high-quality inclusive preschool classrooms.

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Appendix A

Executive Summary of Research

Recommendation Checklist

1. Inclusion time for children with autism spectrum disorder (ASD) needs to be an integration of specialized evidence-based protocols and implementation of blended general education curriculum with necessary supports for the highest student outcomes in the least restrictive environment (LRE).

- Children with ASD benefit from small group instruction within general education programming for abstract academic concepts (i.e., phonological awareness, reading tasks) after large group instruction.
- Placement considerations for children with severe symptoms of ASD need to be carefully examined, given higher severity students within inclusive settings demonstrated more significant progress in language and socialization.
- Inclusive settings proved more beneficial in the area of cognition and social language than autism-only or mixed-disability settings for verbal students with lower adaptive scores, who were considered more severe.

2. Provide peer-mediated social skills training to typical peers and students with ASD for increased benefits during inclusive opportunities.

- Programs such as Superheroes Social Skills or Circle of Friends, etc. need to be incorporated as a structured intervention for maximum benefit to the student with ASD.
- Implementation of these peer-mediated social skills can be supported by special education staff (i.e., licensed school psychologists, special education teachers, etc.) to assist the general education teacher in maximizing student outcomes.
- Cognitive ability is the best predictor of verbal communication ability; therefore, educators need not focus on the severity of symptoms or adaptive functioning when making placement decisions for LRE.
- Age 5 receptive/expressive language skills are predicted by age 2 and 3 cognitive and language ability; therefore, rigorous early education interventions give

children with ASD a higher likelihood for better outcomes in terms of language skills.

3. For improved student outcomes, specialized evidence-based protocols such as Treatment and Education of Autistic and related Communication Handicapped Children (TEACCH) programming and Learning Experiences and Alternative Program for Preschoolers and Their Parents (LEAP) need to be delivered with high-intensity and program fidelity.

- Implementation of at least 2 hours of TEACCH methodology over two years along with home carry-over of 2 hours proved beneficial in reducing ASD symptoms after 12-15 months.
- TEACCH methodology has proven effective despite cultural and language differences in other countries (i.e., China, Italy, and Canada); therefore, implementation with Spanish-speaking students with ASD within PPCD and LEAP classes needs to be considered.
- LEAP replication classrooms need to be considered by school districts rather than indirect manualized "train-the-trainer" given the disparity between implementation fidelity.
- Data for LEAP and PPCD graduates needs to be monitored by school districts as students transition to later grades and specialized programs to ensure student performance aligns with educational programming and LRE even after transitioning.

4. Children with ASD benefit from bilingual exposure, and families should not be advised by school professionals to suppress their home language.

- Bilingual children achieved higher adaptive scores, and no significant differences in receptive/expressive language skills were evident. School districts should consider PPCD, LEAP, and other specialized classrooms are provided within a bilingual education context.
- No additional language delays were evident in bilinguals with ASD when compared to monolingual peers; instruction in the home language may produce transference to English language patterns.
- There have been no contraindications for bilingualism in children with ASD; professionals must search for culturally and linguistically appropriate evidence-based tools to meet the language needs of each student.

Support of Inclusion in Children with ASD

Green, K., Terry, N., & Gallagher P. (2014). Progress in language and literacy skills among children with disabilities in inclusive early reading first classrooms. *Topics in Early Childhood Special Education, 33*, 249-259. doi:10.1177/0271121413477498

Setting. Data was collected from children who attended prekindergarten Early Reading First (ERF) classrooms located in public schools or private daycares across the southeastern United States.

Study sample. The participants were enrolled across 38 inclusive ERF classrooms in which the Prekindergarten Early Language and Literacy Classroom Observation (ELLCO) score of at least three was achieved on the Language and Literacy Environment items. The participants included 77 prekindergarten students with IEP's who did not require adaptations for standardized language tasks with a mean of 50 months of age. The students with IEP's could include mixed disabilities common in early childhood settings (i.e., developmental delays, ASD, PPD-NOS, language impairments, cognitive impairments, Down Syndrome). Furthermore, the 77 typically-developing prekindergarten student's mean age was 51 months. All participants included in this study reported English as their first language.

Procedure. The participants were administered the Peabody Picture Vocabulary Test-Third Edition (PPVT-3) twice, in fall and spring. Additionally, some schools administered the Phonological Awareness Literacy Screening Prekindergarten (PALS-PreK), which measured the areas of upper letter recognition, beginning sounds, print awareness, and rhyme awareness.

Outcomes. On PPVT-3, neither group of participants demonstrated significant progress from fall to spring. On the PALS-PreK, children with disabilities made the least progress on phonological awareness tasks (auditory based and abstract) and most gains in print awareness and recognizing uppercase letter tasks (orthographic more concrete). Students with disabilities only narrowed the achievement gap in expressive language and print awareness compared to their typically-developing peers.

Support for implementation. Although significant progress was evident in emergent literacy skills for both groups, it was noted by researchers that students with disabilities did not catch up on any language or literacy tasks. Similar gains were evident on PPVT-3 results via ERF classroom participation. This study supports inclusion with data cited as influential by National Early Literacy Panel (NELP) 2008 for later academic success; however, some skills need to be instructed during small-group explicit instruction for added benefit to children with disabilities.

Rafferty, Y., Piscitelli, V., & Boettcher, C. (2003). The impact of inclusion on language development and social competence among preschoolers with disabilities. *Exceptional Children, 69,* 467-479. doi: 10.1177/001440290306900405

Setting: The participants in this study were enrolled in a New York state community-based preschool program.

Study Sample: The researchers included 96 preschoolers with disabilities between the ages of 33-57 months of age. A total of 68 of those preschoolers were in inclusion classes. The researchers reported that 47 students were classified with severe disabilities, and 49 were not judged as severely impaired. It was reported that the sample was comprised of 71% male and 87% of Caucasian ethnic background.

Procedure: The participants in this study were administered the Preschool Language Scales, 3rd edition (PLS-3), Social Skills Rating System (SSRS) - Teacher Version and Wechsler Preschool and Primary Scale of Intelligence-Revised (WPPSI-R). Furthermore, the researchers reviewed student's files for demographic individual and family characteristics, as well as previous testing for initial placement into the preschool program.

Outcomes: The researchers concluded that no association was found among child, parent, or family characteristics on outcomes pre- or post-test. Researchers found that children who were higher functioning were placed at a greater rate in inclusive settings. Furthermore, children with a non-severe label evidenced greater placement in inclusion, and severely disabled students were equally distributed between inclusion and segregated settings. Language development and social scores of students post-test who were non-severe were comparable across settings. Researchers found that severely impaired students in inclusion demonstrated higher development rates for language and socialization than peers in segregated classes. Problem behaviors were less for severely disabled students in segregated classes than those in inclusion.

Support for Implementation: Placement considerations need not be biased for students with higher functioning skills in inclusive settings. This is especially true, given that when non-severe students are placed in either inclusive or segregated settings, their gains in language and socialization did not differ significantly. Students with more severe needs can benefit considerably from inclusive environments and make more progress to be better equipped to access the curriculum with higher degrees of language and socialization skills.

Nahmias, A. S., Kase, C., & Mandell, D. S. (2014). Comparing cognitive outcomes among children with autism spectrum disorders receiving community-based early intervention in one of three placement. *Autism, 18*(3), 311-320. doi: 10.1177/1362361312467865

Setting: The study was conducted in an urban, east coast city in the United States comprised predominantly of African American children.

Study Sample: The participants were 98 children with ASD, K through 2nd grade, who completed 3-5 early intervention (EI) services primarily in a classroom setting with complete cognitive assessment at initial and re-test.

Procedure: An extensive review of records was conducted for this study of early intervention records, previous cognitive assessments, diagnostic testing for ASD, and IEPs. Furthermore, the Differential Abilities Scale, Second Edition (DAS) was administered to all participants.

Outcomes: Inclusive settings were more beneficial for cognitive outcomes than mixed disability placements for verbal students and presented initially with lower scores for adaptive behavior. Severely impaired students in the aspect of social language also benefited more from inclusion than autism-only placements.

Support for Implementation: Inclusive classrooms for children with ASD with severe social impairments was proved as a more beneficial setting than autism-only settings, which is consistent with the concept of generalization and the theoretical framework of the current study. Furthermore, even in mixed disability placement classrooms, the gains in cognition were higher if the child was more severely impaired socially, and when verbal, they demonstrated lower adaptive skills in an inclusive setting.

Schwartz, I. S., Sandall, S. R., McBride, B. J., & Boulware, G. (2004). Project DATA (Developmentally Appropriate Treatment for Autism): An inclusive school-based approach to educating young children with autism. *Topics in Early Childhood Special Education, 24*(3), 156-168.

Setting: Project DATA school-based portions were conducted at an early childhood program at a university in the United States.

Study Sample: The participants were 48 preschool children with ASD, of which 11 were girls, and 37 were boys. The mean length of participation was 16 months in the project, with ages between 3-6.

Procedure: The participants were administered the Assessment Evaluation and Programming for Infants and Children (AEPS) in the domains of adaptive, cognitive, social-communication, gross motor, and fine motor. The functional outcomes (i.e., verbal, follows complex directions, motor imitation, toilet training, symbolic play, cooperative with peers) were also measured, along with parent and consumer satisfaction measures.

Outcomes: On the AEPS, results for this study included 22% increase in adaptive domain, 11% increase in cognitive domain, 21% increase in social communication domain, 24% increase in social domain, 30% increase in fine motor domain, and 15%

increase in gross motor domain. For functional skills 18% increase in the number of children that could use at least five-words spontaneously post assessment, 35% increase for following directions, 32% increase for motor imitation, 45% increase in toilet-trained children, symbolic play increased by 8%, and cooperative play increased by 11% post-assessment. Parents, in general, were satisfied as measured by feedback during interviews and demand for enrollment into the program. School staff also appeared satisfied given that three other school districts replicated Project DATA Model.

Support for Implementation: Inclusion that is supported with specialized implementation of blended curriculum and specific program components for children with ASD can yield progress across developmental areas. As the researchers suggested, parents cannot be asked to place their children in the least restrictive environments and not provide them with specialized support for improvement. It is necessary to include methodology that is evidence-based and can be progress monitored more regularly than during progress reports or every three years at the re-evaluation.

Support of Communication and Peer-Mediated Social Skills in Children with ASD

Radley, K. C., Hanglein, J., & Arak, M. (2016). School-based social skills training for preschool-age children with autism spectrum disorder. *Autism, 20*(8), 938-951. doi: 10.1177/1362361315617361

Setting: This study was conducted with participants recruited from a preschool with an enrollment of typical peers and children with ASD in the Northeastern part of the United States

Study Sample: The participants in this study were two typical peers, four-year-old girls, and two children with ASD, four-year-old boys.

Procedure: The Superheroes Social Skills Program included didactic instruction of eleven hour-long, weekly sessions via the utilization of video modeling and follow-up practice among typical peers and students with ASD. The intervention was delivered within the preschool by a licensed school psychologist who completed the training stated within the program manual.

Outcomes: The authors concluded that the participants with ASD mastered skills after only two to three sessions, which was more time than older elementary students in other studies who also utilized this program. Six weeks after the discontinuation of the intervention, maintenance was observed for all social skills with both groups of participants.

Support for Implementation: A structured social skills program such as the one presented in this study may best be delivered by a professional trained in special education. It is necessary to consider that inclusion may not be sufficient to support

social skills for children with ASD. It is crucial to deliver instruction for this area as well, and teach typical peers the necessary strategies to interact with others who need support in this area of communication.

Locke, J., Rotheram-Fuller, E., & Kasari, C. (2012). Exploring the social impact of being a typical peer model for included children with autism spectrum disorder. *Journal of Autism and Developmental Disorders, 42,* 1895-1905. doi: 10.1007/s10803-1437-0

Setting: Participants were selected from a large urban school district, 30 public schools, conducting a randomized-controlled treatment trial examining peer and social systems of 60 elementary-aged children with ASD.

Study Sample: The peer models included 107 typically-developing children, 52 females and 55 males, with a median age of 7.92. The comparison group included 107 typically-developing children, 57 females and 50 males, median age of 7.91.

Procedure: The researchers had typical peer participants and control group complete the Friendship Survey, Friendship Qualities Scale, and Peer Network Dyadic Loneliness Scale from which social network centrality and friendship reciprocity were derived. The children with ASD were randomly placed into target child mediated, peer-mediated, combination of target child- and peer-mediated, and control group (inclusion). Intervention training for peer models included direct instruction (e.g., initiate a game, initiate/sustain a conversation, praise, etc.), role-playing, modeling, and practice. Three children were selected from the child with ASD's classroom, and peer models engaged twice a week during recess and lunch.

Outcomes: Results of the study indicated that typically-developing peer models demonstrated higher degrees of connectedness and social aptitude toward children with ASD than non-peer models. The results were true for data collection at the beginning and post-intervention. Peer models were found to either be nuclear or secondary in social network centrality, which proves these children had stable connections and popularity within the classroom.

Support for Implementation: This research study can be cited as support for peer-models for children with ASD during unstructured settings (e.g., lunch, recess, etc.). It can serve as evidence for teachers, parents, and administrators that it is not detrimental and beneficial for typically-developing children to form friendships and serve as support for children with ASD in the classroom.

Kjellmer, L., Hedvall, A., Fernell, E., Gillberg, C., & Norrelgen, F. (2012). Language and communication skills in preschool children with autism spectrum disorders: Contribution of cognition, severity of autism symptoms, and adaptive functioning to the variability. *Research in Developmental Disabilities, 33,* 172-180. doi: 10.1016/j.ridd.2011.09.003

Setting: The data for the participants in this study were collected from referrals to an ASD center in Stockholm County, Sweden.

Study Sample: The sample included 111 boys and 18 girls of chronological age range 24-63 months (mean 45 months). The participant diagnoses were as follows, 78 with ASD, 32 with PDD-NOS, 11 with ASD unspecified, and 8 with Asperger's syndrome.

Procedure: The children were grouped into intellectual disability group, learning problems (developmental delays), and normal cognitive abilities. Via observation or parent report, the following measures were completed: MacArthur-Bates Communicative Development Inventories, Autistic Behavior Checklist, and Vineland Adaptive Behavior Scales (Daily Living Skills and Socialization).

Outcomes: Results indicated that the best predictor for verbal communication abilities was the cognitive ability of the child, not his/her severity of symptoms, or adaptive functioning. On the other hand, non-verbal communication appeared to have less of a relationship to cognitive functioning and more to the severity of symptoms and adaptive behavior.

Support for Implementation: This study was of interest because non-verbal communication (e.g., gestures, pointing, etc.) typically comes before verbal abilities and assists children with ASD to, at times, physically manipulate conversation partners to gain access to wants/needs/preferences. The importance of this research to the current research project is that it is necessary to include more severe students with typical peers to decrease the autistic symptoms and teach them adaptive skills needed for the development of verbal skills.

Kalyva, E., & Avramidis, E. (2005). Improving communication between children with autism and their peers through the 'Circle of Friends': A small-scale intervention study. *Journal of Applied Research in Intellectual Disabilities, 18,* 253-261. doi: 10.1111/j.1468-3148.2005.00232.x

Setting: The researchers examined if the utilization of the Circle of Friends program proved effective for the improvement of communication and social skills in preschoolers with ASD in London.

Study Sample: The 5 participants were (a) diagnosed with ASD between the ages of 3.10-4.7, (b) received Applied Behavior Analysis (ABA) therapy, (c) presented with average IQ, and (d) attended mainstream school placement.

Procedure: Three boys were part of the randomly assigned intervention group, and two remained in the control group. The control group received the intervention after the completion of the study. The Circle of Friends program was conducted over three months for 30-minute sessions once a week. Five typically-developing peers were

selected to interact with the children with ASD during circle time. These children were told that they were helping peers with ASD learn how to ask others to play. The researchers measured the number of responses by contact initiatives from other peers, and also the initiation attempts by the child with ASD. Preferred materials/toys were utilized by children with ASD to increase motivation.

Outcomes: Results indicated that there was an increase in the responses and initiations of the experimental group, even during the follow-up two months after the intervention was completed. The researchers concluded that given that this program assists with basic communication, it then gives way for the development of social skills.

Support for Implementation: This peer-mediated intervention on a small scale proved beneficial for children with ASD to initiate and respond to communication attempts, which is a precursor skill for socialization abilities. Conducting circle time in a PPCD classroom may not be the most beneficial input for children with ASD due to the lack of trained typical peers to assist. Additionally, direct instruction for typical peers should be conducted to support both the child with ASD and the typical peer on how to respond and what to look for during the communication exchanges.

Thurm, A., Lord, C., Lee, L., & Newschaffer, C. (2007). Predictors of language acquisition in preschool children with autism spectrum disorders. *Journal of Autism and Developmental Disorders, 37,* 1721-1734. doi: 10.1007/s10803-006-0300-1

Setting: This study was part of a larger scale longitudinal study for children diagnosed before age 3 with ASD or other developmental disabilities. The researchers analyzed if there were predictors of age 5 language skills (i.e., comprehension and expression) for children with diagnoses of ASD, pervasive developmental disorder-not otherwise specified (PDD-NOS), and other developmental disorders not related to ASD. The researchers were also interested in providing insights into the specific characteristics of children with ASD who, despite intact cognitive ability, continued to present with significantly decreased language skills at age 5.

Study Sample: The groups in this study were based on diagnosis at age 5. The sample included 110 children referred for ASD and 21 children with developmental delays with no evidence of ASD. Many of the participants received some form of TEACCH intervention

Procedure: An initial assessment was administered at age 2 and follow-up at age 3 (for children suspected to have ASD) and also between ages 4 and 5. Sessions were divided into two blocks. A diagnosis was given at age 2 and then at age 5. The measures

administered (e.g., standardized tests and parent questionnaires) were selected based on the child's developmental level and their ability to establish a basal and reach a ceiling on all tests. All participants' intellectual ability (verbal/non-verbal) was assessed for this study.

Outcomes: Researchers found that age 2 and 3 measures of cognition and language (parent report/child completed) predicted receptive and expressive language development at age 5. The strongest predictor of age 5 language was age 2 non-verbal cognitive ability. Furthermore, age 3 communication skills were stronger predictions of age 5 language for children with ASD. Expressive language outcomes were associated with imitation of simple sounds and support the link between oral-motor speech abilities, and expression among children with ASD.

Support for Implementation: If age 2 and age 3 predict outcomes at age 5, then the rigor in which early childhood interventions are provided need to incorporate opportunities for interactions with typical peers. These interactions could include responding to joint attention, imitation of simple sounds, and development of cognitive processes that give children with ASD a higher likelihood for better outcomes in terms of language skills.

Support of ASD Curriculum (TEACCH & LEAP)

D'Elia, L., Valeri, G., Sonnino, F., Fontana, I., Mammone, A., & Vicari, S. (2014). A longitudinal study of the TEACCH program in different settings: The potential benefits of low intensity in preschool children with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, *44*(3), 615-626. doi: 10.1007/s10803-013-1911-y

Setting: This article examined if the TEACCH program was delivered in a low-intensity manner (e.g., <20 hours a week) across home and school environments in Italy proved beneficial to reduce autistic symptoms and parental stress.

Study Sample: The inclusion criteria for this study included (a) diagnosis of ASD or PDD-NOS confirmed by Autism Diagnostic Interview-Revised (ADI-R), (b) chronological age between 2:0-6:11, (c) no concomitant medical diagnoses, and (d) a 2-year period of intervention. There were 15 children in the control group and 15 in the experimental group, in which the parents determined participation in experimental versus the control group.

Procedure: To measure changes in the autistic symptoms of the participants and parental stress, the researchers utilized the Autism Diagnostic Observation Schedule (ADOS), Griffith Mental Developmental Scales, Vineland Adaptive Behavior Scale, MacArthur

Communication Developmental Inventories, Child Behavior Checklist, and Parenting Stress Index. Four probes, including baseline, were conducted throughout the study by the researchers. Participants in the experimental group received 2 hours at home and 2 hours at school of TEACCH interventions for two years. The control group received 2 hours of psychomotor therapy and 2 hours of speech therapy for the same duration.

Outcomes: Results indicated positive changes in the main outcome indicators (e.g., severity, communication, and adaptive behavior) of the participants on the measures administered; however, no significant difference was found between the experimental group and the control group when a low intervention TEACCH strategy was utilized. Between baseline and the third probe 12-15 months after the study began, the experimental group evidenced improvement on all of the ADOS classifications. Regarding parental stress, there was a reduction evidenced among the experimental group but not the control group.

Support for Implementation: Low intervention within the classroom environment may not be sufficient when using a specific program as an intervention (i.e., TEACCH). This study also included 2 hours of home intervention component. This study can be used to encourage and support the regular use of home training programs during consideration of IEP programming. The rigor of the interventions that are delivering during PPCD, ABLE, etc. need to be monitored for positive student outcomes.

Tsang, S. K. M., Shek, D. T. L., Lam, L. L., Tang, F. L. Y, & Cheung, P. M. P. (2007). Brief report: Application of the TEACCH program on Chinese preschool children with autism - Does culture make a difference? *Journal of Autism and Developmental Disorders, 37,* 390-396. doi: 10.1007/s10803-006-0199-6

Setting: This study was conducted in Hong Kong, China, by a non-government organization that provides rehabilitative services to preschool children and families.

Study Sample: The experimental group in this study was comprised of 18 children (17 boys and one girl) with ASD ages 3-5 years old. The participants attended preschool in Hong Kong and received TEACCH intervention for 12 months. The control group was 16 children (12 boys and four girls) with ASD of the same age range who were receiving an implementation of other interventions except for TEACCH programming within their preschool environment.

Procedure: The researchers assessed cognition and social adaptive functioning with the following measures: (a) Developmental Scale of the validated Chinese version of Psycho-educational Profile- Revised (PEP-R), (b) Merrill-Palmer Scale of Mental Test, and (c) Hong Kong Based Adaptive Behavioral Scales (HKBABS). For the participants in this study, pretest baseline measures were collected, as well as Posttest 1 after 6 months, and Posttest 2 after 12 months.

Outcomes: During the first six months of intervention, the experimental group evidenced more significant gains on the CPEP-R subtests of perception, fine motor, and gross motor

than the control group. During that same treatment period, the control group demonstrated a higher daily-living domain and overall standard score on the HKBABS. Significant improvement was noted on the three measures mentioned above after the first year of exposure to TEACCH; however, the most notable gains were at the Posttest 1 testing. The socialization domain evidenced more significant gains between post-test 1 and post-test 2. No significant differences in the communication domain were noted between groups.

Support for Implementation: Via results of this study, TEACCH methodology despite cultural and language differences proved efficacious among preschoolers in Hong Kong, China; however, the domain of communication did not demonstrate significant improvement in either group. Additionally, the domain of socialization did not increase until 6 months into the study. While TEACCH methodology is effective, without the inclusion of typical peers, improvement of communication and socialization are hallmarks of ASD appear much more challenging due to lack of typical-peer modeling.

Panerai, S., Zingale, M., Trubia, G., Finocchiaro, M., Zuccarello, R., Ferri, R., & Elia, M. (2009). Special education versus inclusive education: The role of the TEACCH program. *Journal of Autism & Developmental Disorders, 39,* 874-882. doi: 10.1007/s10803-009-0696-5

Setting: This study was conducted with participants recruited in Sicily, Italy, at a research institute working on diagnoses and treatment of "…Mental Retardation and Brain Aging," with programs specifically for children with ASD and their families.

Study Sample: The 34 male participants for this study were divided as follows: (a) 13 participants in Natural Setting (NS) TEACCH, (b) 11 participants in Residential placement (R) TEACCH, and (c) 10 participants in Inclusive nonspecific program (INSP). The inclusion criteria for this study included primary school enrollment, evaluation on file for at least three years, repeated assessments with Psycho-Educational Profile-Revised (PEP-R) and the Vineland Adaptive Behavior Scale (VABS) - survey form.

Procedure: Participants were assessed twice with three years in between evaluations to determine growth on PEP-R areas (i.e., imitation, perception, fine motor, gross motor, eye-hand coordination, cognitive performance, cognitive-verbal performance, and VABS (i.e., communication, daily living, socialization, motor skills, and maladaptive behavior). The R TEACCH group lived at the institute and visited home regularly, without the attendance of any traditional schooling. The NS TEACCH group was enrolled in mainstream schools in which teachers and parents received TEACCH program training. The INSP group was diagnosed with ASD at the institute; however, no specific educational programming was implemented.

Outcomes: Achievement for participants in NS-TEACCH and R-TEACCH groups were at higher rates than those achieved by INSP (i.e., an intra-group difference from first to

second testing). The NS-TEACCH and R-TEACCH groups exhibited statistical significance in all domains of the VABS.

Support for Implementation: Findings of this study support that TEACCH methodology has higher efficacy for children with ASD than other approaches that are not designed for this group specifically. The authors described that this is primarily because different methods focus on academic rather than functional/adaptive skills. TEACCH has been described as a program with an emphasis on the organization of the environment and individualized targets, including educational and adaptive skills. Inclusion without specialized support did not prove beneficial in this study. If we provide students with special needs programming via specialized protocols, educators must problem-solve how to incorporate those strategies into regular education inclusion time.

Strain, P. S., & Bovey, E. H. (2011). Randomized, controlled trial of the LEAP model of early intervention for young children with autism spectrum disorders. *Topics in Early Childhood Special Education, 31*(3), 133-154. doi: 10.1177/0271121411408740

Setting: The intervention classrooms were located across the United States in metropolitan, suburban, and rural areas for there to be a higher generalization of findings.

Study Sample: The 27 intervention classrooms (i.e., 14 metropolitan, ten suburban, and three rural) included in the study educated approximately 177 children. The 23 comparison classrooms (i.e., 12 metropolitan, eight suburban, and three rural) in the study taught around 117 children.

Procedure: The researchers ensured that the following variables for the developmental outcomes for children with ASD were present within the recruited sites: (a), minimum ratio of 1:5 for adults to children, (b) minimum ratio of 2:1 typical peers to children with ASD, (c) enrollment of children with ASD in inclusive classrooms, and (d) intensity of services provided. The researchers completed the following measurements for participant analyses: (a) Childhood Autism Rating Scale (CARS), (b) Preschool Language Scales, 4th Edition (PLS-4), (c) Mullen Scales of Early Learning, and (d) Social Skills Rating System (SSRS).

Outcomes: The following five results were reported in the findings of this study: (a) after two years 90% of LEAP replication coached classrooms had high program fidelity, when compared to 28% using manualized materials, (b) progress for adverse behaviors, cognition, language, pragmatic skills, and overall generalized ASD symptoms were more significant in LEAP replication classrooms, (c) children in inclusive settings were exposed to higher rigor in regard to curriculum/activities, (d) paraprofessionals in segregated classrooms provided greater support thereby decreasing student independence,

and (e) students with ASD in inclusive settings received higher expectations for all dimensions of curriculum.

Support for Implementation: The research outcomes are significantly better if LEAP coaching was conducted versus indirect manualized (i.e., "train-the-trainer"). It would also be relevant to analyze if educators are implementing the LEAP program within the school district utilized with fidelity.

Strain, P. S. (2017). Four-year follow-up of children in the LEAP randomized trial: Some planned and accidental findings. *Topics in Early Childhood Special Education, 37*(2), 121-126. doi: 10.1177/0271121417711531

Setting: Follow-up study to the intervention classrooms utilized in Strain and Bovey (2011), which were located across the United States in metropolitan, suburban, and rural areas for there to be a higher generalization of findings.

Study Sample: There was 32% attrition from the original randomized control trial four years prior. The Strain and Bovey (2011) utilized 27 intervention classrooms (i.e., 14 metropolitan, ten suburban, and three rural) included in the study educated approximately 177 children. The 23 comparison classrooms (i.e., 12 metropolitan, eight suburban, and three rural) in the study taught around 117 children.

Procedure: The measures administered to this group of participants were as follows: Kaufman Test of Educational Achievement, Third Edition, Test of Language Development-4 Edition (TOLD), Childhood Autism Rating System, Leiter Brief IQ Test, Vineland Adaptive Behavior Scales (VABS), and Social Skills Rating System (SSRS).

Outcomes: Data indicated that both groups were achieving at reasonable rates; however, children who were "LEAP graduates" appeared to be doing better. Examiner accidentally came across unexpected data that children who should be enrolled in inclusive classes based on preschool results of LEAP programming were not. The ensuing trends pointed to (a) the type of curriculum being utilized, (b) para-educator support, and (c) high expectations of schooling. The author concluded that student placement must not have been driven solely by performance, but unfortunately, by district resources.

Support for Implementation: When children are enrolled in specialized classrooms, there must be monitoring at the district level of positive outcomes that yield mainstreaming, inclusion, and least restrictive placements than segregated special education classes. The goal is for continuous development and maximum effective inclusion for the development of social skills and communication, hallmark impairments of ASD.

Support of Bilingualism in Children with ASD

Hambly, C. & Fombonne, E. (2012). The impact of bilingual environments on language development in children with autism spectrum disorders. *Journal of Autism and Developmental Disorders, 42,* 1342-1352. doi: 10.1007/s10803-011-1365-z

Setting: The study was conducted in Canada with participants recruited from the Ontario and Quebec area who attended an ASD clinic affiliated with a children's hospital.

Study Sample: The participants included 75 children with ASD aged 36-78 months, of which 59 of the children were diagnosed with ASD, 1 with Asperger syndrome, and 16 with PDD-NOS. Enrollment was limited to children with spoken vocabulary in French, English, Chinese, Farsi, Hebrew, Italian, Romanian, Spanish, and Tamil due to the availability of expressive vocabulary questionnaire in those languages. Trilingual exposure was confirmed in 11 of the participants. Verbal and nonverbal children with ASD were included in this sample. Groups were divided into bilingual and monolingual, with a sub-group formed based on dual-language exposure for the bilinguals based on exposure pre or post 12 months of age.

Procedure: The authors utilized the Language Environment Interview (LEI) from which major language exposure was identified. Additionally, families completed a language diary for language exposure data, and participants/parents were administered the following: Completion of Social Responsiveness Scale (SRS); MacArthur Communicative Development Inventory: Words and Sentences (MCDI); and Vineland Adaptive Behavior Scales, Second Edition.

Outcomes: Bilingually-exposed children with ASD do not evidence additional delays in language development compared with monolingual counterparts. Of the bilingually-exposed children, 62% spoke words in the second language, but vocabulary appeared decreased when compared to the first language. Additionally, only a few participants presented with the use of word phrases.

Support for implementation: Given that bilingually exposed children with ASD do not appear more delayed than monolingual counterparts, it is beneficial to look into bilingual education for programs such as PPCD, LEAP, etc. Instruction in the home language/dominant language may produce more significant benefits that can transfer to English.

Ohashi, J. K., Mirenda, P., Marinova-Todd, S., Hambly, C., Fombonne, E., Szatmari, P., … the Pathways in ASD Team. (2012). Comparing early language development in monolingual- and bilingual-exposed young children with autism spectrum

disorders. *Research in Autism Spectrum Disorders, 6*, 890-897. doi: 10.1016/j.rasd.2011.12.002

Setting: Data was gathered from a larger scale Canada-wide research project, Pathways in ASD.

Study Sample: Inclusion criteria included a confirmed ASD diagnosis and the ability to use at least 30 words. Children were excluded if they were also affected by a neuromotor disorder, genetic anomalies, or severely impaired in vision or hearing. The participants included 20 bilingually-exposed (BE) children with ASD ages 31-49 months who were simultaneous language learners. The 40 children with monolingual exposure (ME) with ASD included in the study were children were between 31-51 months. Children with less than 30 words were excluded from this study.

Procedure: Data collection measures included, (a) Preschool Language Scales, 4th edition (PLS-4), (b) Vineland Adaptive Behavior Scales, 2nd ed. (VABS-II), (c) Autism Diagnostic Observation Schedule (ADOS), (d) Autism Diagnostic Interview-Revised (ADI-R), and (e) services log of language-related intervention.

Outcomes: No difference was found between BE and ME groups on the dependent measures of early language development. There was also not a difference in the age of first words and age of first phrases between the groups. The researchers also did not identify a difference across groups in autism-related communication impairments.

Support for implementation: Findings within this exploratory study indicated bilingualism does not add "...burden to the developing language system of young children with ASD." This study analyzed data for French/English bilinguals, and it would be interesting to analyze data for Spanish/English bilinguals. This study supports the notion that within PPCD or LEAP classrooms, bilingualism among children with ASD follows similar patterns to overall language impairment in monolingual peers.

Reetzke, R., Zou, X., Sheng, L., & Katsos, N. (2015). Communicative development in bilingually exposed Chinese children with autism spectrum disorders. *Journal of Speech, Language, and Hearing Research, 58*, 813-825. doi: 10.1044/2015_JSLHR-L-13-0258

Setting: The study was conducted in Guangzhou, China, with a participant population that was recruited from a hospital child development and behavior clinic and a school for children with ASD.

Study Sample: The eligibility criteria for this study included (a) confirmed ASD, Asperger syndrome, or pervasive developmental disorder-not otherwise specified (PDD-

NOS) diagnoses by pediatrician and psychologist, (b) at least 45 month chronological age, (c) written ability to read simple Chinese characters by parents, and (d) oral ability to speak Mandarin or Cantonese by parents. Of the 102 participants, 90 were diagnosed with ASD, 7 with Asperger syndrome, and 5 with PDD-NOS. Their ages ranged between 45-98 months of age. Exclusionary criteria included children with other developmental disabilities, non-verbal status, and hearing impairment. Furthermore, a Social Communication Questionnaire (SCQ) score of 19, above the cut-off point, was utilized to corroborate ASD and PDD-NOS range. For these reasons, only data from 54 children were used for the analysis of this study. Of those, 23 were determined bilingually exposed and 31 monolingual.

Procedure: Research team administered the following dependent measures: Children's Communication Checklist-2 (CCC-2), Alberta Language Environment Questionnaire (ALEQ), Social Communication Questionnaire (SCQ), Language Environment Interview (LEI), and the Social Responsiveness Scale (SRS). Researchers were interested in investigating the structural (i.e., semantics, articulation, syntax) and pragmatic language abilities of monolingual and bilingually exposed children with ASD being raised in China.

Outcomes: Results indicated (a) no adverse association between bilingual exposure and language development between dominant and non-dominant language, and (b) no relationship between age of onset for second language exposure and language use on any measure within this study.

Support for Implementation: No contraindications for bilingualism with children with ASD have been evident in preliminary studies. Service providers and educators need to keep current with the literature being published for best practices to support the recommendations being given to families.

Valicenti-McDermott, M., Tarshis, N., Schouls, M., Galdston, M., Hottinger, K., Seijo, R., … Shinnar, S. (2012). Language differences between monolingual English and bilingual English-Spanish young children with autism spectrum disorder. *Journal of Child Neurology, 28*(7), 945-948. doi: 10.1177/0883073812453204

Setting: This study was conducted with data from a university-level developmental center predominantly serving Bronx residents of Hispanic and African-American descent. The evaluations of children under three years of age with a diagnosis of ASD between 2003-2019 were reviewed for selection criteria.

Study Sample: Eighty participants, 40 bilingual English-Spanish, and 40 monolingual English, with a diagnosis of ASD under the age of 3, were selected for data analysis.

Bilingual was defined in this study as having exposure to both languages in the home. Both groups appeared to be similar developmentally and regarding the characteristics of ASD.

Procedure: The participant's speech and language evaluations were reviewed and included criterion reference data (e.g., spoken words, gesture use, responds to directions with/without gestures, etc.), Rossetti Infant-Toddler Language Scale, bilingual information survey, Childhood Autism Rating Scale, Bayley Scales of Infant Development Mental Developmental Index, 2nd-3rd edition, and Vineland Adaptive Behaviors Scale data.

Outcomes: Results indicated no significant differences in receptive/expressive language skills based on language exposure at home. The only difference was that bilingual children received higher adaptive behavior scores.

Support for inclusion: The significance of this research is that ASD is prevalent among all cultures and socioeconomic backgrounds; therefore, we need more evidence base about various dialects and languages around the world. This study included participants with similar language criteria to the school district being utilized in the current study, Spanish-English bilinguals.

Appendix B

Explanatory Paragraph and Teacher Survey

Explanatory paragraph (reviewed in email and at professional staff development)

This survey is part of a doctoral research study to investigate general education prekindergarten teacher perceptions regarding the inclusion of students identified as having Autism (ASD). In addition, this survey will ascertain the level, if any, of training received in the areas of socialization and communication skills for students with ASD. The survey has been reviewed and approved by the University of Houston's Institutional Review Board (IRB). All survey responses will remain confidential with the data analysis being conducted at the aggregate level to ensure that no individual can be identified by the responses collected.

The completion of this survey is strictly voluntary. If possible, please complete this survey within 10 days of receipt. Any questions regarding this study or survey can be addressed to: Teresa Guerra, principal investigator at tegarcia@uh.edu or Dr. Kristi Santi, Faculty Advisor at klsanti@uh.edu. Thank you in advance for your time and completion of this survey.

Survey: General education prekindergarten teacher's perceptions regarding training of inclusive practices for socialization and communication skills

Directions: Please fill in the blank or check your response. Demographic questions 2-10 will only be utilized to describe the sample within this study. Questions 11-29 will gather information regarding the Professional Development training completion on inclusive practices.

SECTION I. Demographics

1. I have read the consent information and agree to take part in the research prior to moving forward to the survey instrument of this study. ____Yes ____No

2. Gender: ____Female ____Male

3. Highest degree completed: ____Bachelor's Degree ____Master's Degree ___ Doctorate

4. Type of teaching certificate:

__Generalist (EC-6) ____Special Education (EC-12) ___ Special Education Supplemental ___English as a Second Language/Generalist (EC-6) ___Bilingual Generalist (EC-6)

___Other, please list

5. Years of teaching experience: ____0-1 ____1-3 ____3-5 ____5-10 ____10-15 ____15+

6. Years of prekindergarten teaching experience:

____0-1 ____1-3 ____3-5 ____5-10 ____10-15 ____15+

7. Year(s) of experience teaching inclusion settings:

____0-1 ____1-3 ____3-5 ____5-10 ____10-15 ____15+

8. Approximately, how many special education students have you had in your classroom during your teaching career? ____

9. Approximately, how many special education PPCD students with a label of Autism have participated through the lens of inclusion in your general education classroom during your teaching career? ____

10. Please click on any special education programs that are on your campus?

Learning Experiences and Alternative Program for Preschoolers and Their Parents (LEAP) Classroom

Preschool Program for Children with Disabilities

Special Prekindergarten

Other: _____

SECTION II. Professional Development training completion on inclusive practices

Circle the correct numeric response to each question using the following survey scale:

1= Strongly disagree 2= Disagree 3=Neutral 4=Agree 5=Strongly Agree

11. I received professional development training specifically addressing students with disabilities in **my university training program**.

12. I received professional development training specifically addressing students with disabilities in **an alternative certificate training program**.

13. I received professional development training specifically addressing students with disabilities in **my past school district employment**.

14. I received professional development training specifically addressing students with disabilities in **my current school district employment**.

15. I received professional development training specifically addressing students with disabilities by **attending training on my own**.

16. I have **not received any training** regarding students with disabilities.

17. I received professional development training to assist special education students in generalization during inclusive opportunities in the area of social and emotional development with the **skill of self-concept**.

18. I received professional development training to assist special education students in generalization during inclusive opportunities in the area of social and emotional development with the **skill of self-regulation** (behavior, emotional, and control of attention).

19. I received professional development training to assist special education students in generalization during inclusive opportunities in the area of social and emotional development with the **skill of relationships with others**.

20. I received professional development training to assist special education students in generalization during inclusive opportunities in the area of social and emotional development with the **skill of social awareness**.

21. I have received professional development training to assist special education students in generalization during inclusive opportunities in the area of language and communication **with listening comprehension skills**.

22. I have received professional development training to assist special education students in generalization during inclusive opportunities in the area of language and communication **with conversational skills**.

23. I have received professional development training to assist special education students in generalization during inclusive opportunities in the area of language and communication **with speech production skills**.

24. I have received professional development training to assist special education students in generalization during inclusive opportunities in the area of language and communication **with vocabulary development skills**.

25. I have received professional development training to assist special education students in generalization during inclusive opportunities in the area of language and communication **with sentences and structure skills**.

26. I have received professional development training to adequately determine the necessary accommodations for a broadly defined range of special education students to access general education curriculum.

27. I have received specific professional development training for the inclusion specifically related to students with Autism Spectrum Disorder into the general education classroom.

28. I have received specific professional development in universal design for learning (UDL), in respect to environmental modifications.

29. I have received specific professional development in universal design for learning (UDL), in respect to instructional tools and strategies.

30. Thank you for your participation in this study! If you would like to opt in for a gift card drawing, please enter your email _____.

UNIVERSITY of HOUSTON

DIVISION OF RESEARCH
Institutional Review Boards

APPROVAL OF SUBMISSION

May 16, 2019

Teresa Guerra

tegarcia@uh.edu

Dear Teresa Guerra:

On May 16, 2019, the IRB reviewed the following submission:

Type of Review:	Initial Study
Title of Study:	CURRICULUM ALIGNMENT FOR BILINGUAL SPECIAL EDUCATION STUDENTS WITH AUTISM AND TEACHER'S PERCEPTIONS ABOUT PROFESSIONAL DEVELOPMENT TO SUPPORT INCLUSION
Investigator:	Teresa Guerra
IRB ID:	STUDY00001622
Funding/ Proposed Funding:	Name: Unfunded
Award ID:	
Award Title:	
IND, IDE, or HDE:	None
Documents Reviewed:	• Protocol for Curriculum Alignment for Students with Autism, Category: IRB Protocol; • Cover letter for study, Category: Consent Form; • Teacher Survey for Study, Category: Study tools (ex: surveys, interview/focus group questions, data collection forms, etc.); • Explanatory Paragraph for email, Category: Recruitment Materials;
Review Category:	Exempt
Committee Name:	Not Applicable
IRB Coordinator:	Sandra Arntz

The IRB approved the study on May 16, 2019 ; recruitment and procedures detailed within the approved protocol may now be initiated. Please submit an amendment to this protocol once approval has been obtained from the school district to include a copy of that approval.

Appendix C

Prekindergarten (PK) and Preschool Program for Children with Disabilities (PPCD) Curriculum Map Checklists

Table C1a

PK First Nine Weeks Scope & Sequence for Reading and Social Studies Aligned to TEA PK Guidelines Language/Communication Domain

TEA PK Guidelines **II. Language & Communication Domain (LCD)**	PK Reading and Social Studies Scope & Sequence First Nine Weeks					
	Total LCD objectives found in **Reading**	#of LCD objectives not addressed explicitly in Reading	# of *instructional practices* for targeting LCD skills in Reading	**Total** LCD objectives found in **Social Studies**	# of LCD objectives skills not addressed explicitly in Social Studies	# of *lessons/hands-on activities* for targeting LCD skills in Social Studies
LCD total objectives (26)	24 of 26	2 of 26	25	0 of 26	26 of 26	14
A. Listening Comprehension Skills						
II.A.1. Child shows understanding by responding appropriately.	X					
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.	X					
II.A.3. Child shows understanding of the language being spoken by teachers and peers.	X					
B. Speaking (Conversation) Skills						
II.B.1. Child is able to use language	X					

for different purposes.						
II.B.2. Child engages in conversations in appropriate ways.	X					
II.B.3. Child provides appropriate information for various situations.	X					
II.B.4. Child demonstrates knowledge of verbal conversational rules.	X					
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.	X					
II.B.6. Child matches language to social contexts.	X					
C. Speech Production Skills						
II.C.1. Child's speech is understood by both the teacher and other adults in the school.	X					
II.C.2. Child perceives differences between similar sounding words.						
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.						
D. Vocabulary Skills						
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.	X					
II.D.2. Child demonstrates understanding of terms used in the instructional language of the classroom.	X					
II.D.3. Child demonstrates understanding in a variety of ways	X					

or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.						
II.D.4. Child uses a large speaking vocabulary, adding several new words daily.	X					
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.	X					
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)	X					
E. Sentences and Structure Skills						
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.	X					
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.	X					
II.E.3. Child uses sentences with more than one phrase.	X					
II.E.4. Child combines more than one idea using complex sentences.	X					
II.E.5. Child combines sentences that give lots of detail, sticks to the topic, and clearly communicates intended meaning.	X					
II.E.6. Child engages in various	X					

forms of nonverbal communication with those who do not speak her native language.						
II.E.7. Child uses single words and simple phrases to communicate meaning in social situations.	X					
II.E.8. Child attempts to use new vocabulary and grammar in speech.	X					

Note. X indicates objective found; blank indicates no objective found.

Table C1b

PK First Nine Weeks Scope & Sequence for Reading and Social Studies Aligned to TEA PK Guidelines Social/Emotional Development Domain

TEA PK Guidelines I. Social/Emotional Development Domain (SD)	PK Reading and Social Studies Scope & Sequence First Nine Weeks					
	Total SD objectives found in **Reading**	#of SD objectives not addressed explicitly in Reading	# of *instructional practices* for targeting SD skills in Reading	**Total** SD objectives found in **Social Studies**	# of SD objectives skills not addressed explicitly in Social Studies	# of *lessons/hands-on activities* for targeting SD skills in Social Studies
SD Total objectives (20)	0 of 20	20 of 20	25	5 of 20	15	14
A. Self-Concept Skills						
I.A.1. Child is aware of where own body is in space and respects personal boundaries.				X		
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.				X		
I.A.3. Child shows reasonable opinion of his own abilities and limitations.						
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.						
B. Self-Regulation Skills 1. Behavior Control						
I.B.1.a. Child follows classroom rules and routines with occasional reminders.				X		
I.B.1.b. Child takes care of and manages classroom materials.				X		

I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.				X		
B. Self-Regulation Skills 2. Emotional Control						
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.						
I.B.2.b. Child can communicate basic emotions/feelings.						
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.						
B. Self-Regulation Skills 3. Control of Attention						
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.						
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.						
C. Relationships with Others						
I.C.1. Child uses effective verbal and non-verbal communication skills to build relationships with teachers/adults.						
I.C.2. Child assumes various roles and responsibilities as part of a classroom community.						
I.C.3. Child shows competence in initiating social interactions.						

I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that share a common plan and goal.						
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.						
I.C.6. Child demonstrates empathy and caring for others.						
I.C.7. Child interacts with a variety of playmates and may have preferred friends.						
D. Social Awareness Skills						
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.						
PK Guidelines II. Language and Communication Domain						
A. Listening Comprehension Skills						
II.A.1. Child shows understanding by responding appropriately.	X					
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.	X					
II.A.3. Child shows understanding of the language being spoken by teachers and peers.	X					
B. Speaking (Conversation) Skills						
II.B.1. Child is able to use language for different purposes.	X					

II.B.2. Child engages in conversations in appropriate ways.	X					
II.B.3. Child provides appropriate information for various situations.	X					
II.B.4. Child demonstrates knowledge of verbal conversational rules.	X					
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.	X					
II.B.6. Child matches language to social contexts.	X					
C. Speech Production Skills						
II.C.1. Child's speech is understood by both the teacher and other adults in the school.	X					
II.C.2. Child perceives differences between similar sounding words.						
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.						
D. Vocabulary Skills						
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.	X					
II.D.2. Child demonstrates understanding of terms used in the instructional language of the classroom.	X					
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to	X					

4,000 words many more than he or she uses.						
II.D.4. Child uses a large speaking vocabulary, adding several new words daily.	X					
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.	X					
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)	X					
E. Sentences and Structure Skills						
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.	X					
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.	X					
II.E.3. Child uses sentences with more than one phrase.	X					
II.E.4. Child combines more than one idea using complex sentences.	X					
II.E.5. Child combines sentences that give lots of detail, sticks to the topic, and clearly communicates intended meaning.	X					
II.E.6. Child engages in various forms of nonverbal communication	X					

with those who do not speak her native language.						
II.E.7. Child uses single words and simple phrases to communicate meaning in social situations.	X					
II.E.8. Child attempts to use new vocabulary and grammar in speech.	X					

Note. X indicates objective found; blank indicates no objective found.

Table C2a

PK Second Nine Weeks Scope & Sequence for Reading and Social Studies Aligned to TEA PK Guidelines Language/Communication Domain

TEA PK Guidelines II. Language & Communication Domain (LCD)	PK Reading and Social Studies Scope & Sequence Second Nine Weeks					
	Total LCD objectives found in **Reading**	#of LCD objectives not addressed explicitly in Reading	# of *instructional practices* for LCD skills in Reading	**Total** LCD objectives found in **Social Studies**	# of LCD objectives skills not addressed explicitly in Social Studies	# of *lessons/hands-on activities* for targeting LCD skills in Social Studies
LCD Total objectives (26)	26 of 26	0 of 26	29	0 of 26	26 of 26	0
II.A.1. Child shows understanding by responding appropriately.	X					
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.	X					
II.A.3. Child shows understanding of the language being spoken by teachers and peers.	X					
B. Speaking (Conversation) Skills						
II.B.1. Child is able to use language for different purposes.	X					
II.B.2. Child engages in conversations in appropriate ways.	X					
II.B.3. Child provides appropriate information for various situations.	X					
II.B.4. Child demonstrates knowledge of verbal conversational	X					

rules.						
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.	X					
II.B.6. Child matches language to social contexts.	X					
C. Speech Production Skills						
II.C.1. Child's speech is understood by both the teacher and other adults in the school.	X					
II.C.2. Child perceives differences between similar sounding words.	X					
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.	X					
D. Vocabulary Skills						
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.	X					
II.D.2. Child demonstrates understanding of terms used in the instructional language of the classroom.	X					
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.	X					
II.D.4. Child uses a large speaking vocabulary, adding several new words daily.	X					
II.D.5. Child increases listening	X					

vocabulary and begins to develop vocabulary of object names and common phrases.						
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)	X					
E. Sentences and Structure Skills						
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.	X					
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.	X					
II.E.3. Child uses sentences with more than one phrase.	X					
II.E.4. Child combines more than one idea using complex sentences.	X					
II.E.5. Child combines sentences that give lots of detail, sticks to the topic, and clearly communicates intended meaning.	X					
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.	X					
II.E.7. Child uses single words and simple phrases to communicate meaning in social situations.	X					
II.E.8. Child attempts to use new	X					

vocabulary and grammar in speech.						

Note. X indicates objective found; blank indicates no objective found.

Table C2b

PK Second Nine Weeks Scope & Sequence for Reading and Social Studies Aligned to TEA PK Guidelines Social/Emotional Development Domain

TEA PK Guidelines I. Social/Emotional Development Domain (SD)	PK Reading and Social Studies Scope & Sequence Second Nine Week					
	Total SD objectives found in **Reading**	#of SD objectives not addressed explicitly in Reading	# of *instructional practices* for SD skills in Reading	**Total** SD objectives found in **Social Studies**	# of SD objectives skills not addressed explicitly in Social Studies	# of *lessons/hands-on activities* for targeting SD skills in Social Studies
SD Total objectives (20)	0 of 20	20 of 20	29	0 of 20	20 of 20	0
A. Self-Concept Skills						
I.A.1. Child is aware of where own body is in space and respects personal boundaries.						
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.						
I.A.3. Child shows reasonable opinion of his own abilities and limitations.						
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.						
B. Self-Regulation Skills 1. Behavior Control						
I.B.1.a. Child follows classroom rules						

and routines with occasional reminders.						
I.B.1.b. Child takes care of and manages classroom materials.						
I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.						
B. Self-Regulation Skills 2. Emotional Control						
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.						
I.B.2.b. Child can communicate basic emotions/feelings.						
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.						
B. Self-Regulation Skills 3. Control of Attention						
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.						
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.						
C. Relationships with Others						
I.C.1. Child uses effective verbal and non-verbal communication skills to build relationships with teachers/adults.						

I.C.2. Child assumes various roles and responsibilities as part of a classroom community.						
I.C.3. Child shows competence in initiating social interactions.						
I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that share a common plan and goal.						
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.						
I.C.6. Child demonstrates empathy and caring for others.						
I.C.7. Child interacts with a variety of playmates and may have preferred friends.						
D. Social Awareness Skills						
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.						

Note. X indicates objective found; blank indicates no objective found.

Table C3a

PK Third Nine Weeks Scope & Sequence for Reading and Social Studies Aligned to TEA PK Guidelines Language/Communication Domain

TEA PK Guidelines II. Language & Communication Domain (LCD)	PK Reading and Social Studies Scope & Sequence Third Nine Weeks					
	Total LCD objectives found in **Reading**	#of LCD objectives not addressed explicitly in Reading	# of *instructional practices* for targeting LCD skills in Reading	**Total** LCD objectives found in **Social Studies**	# of LCD objectives skills not addressed explicitly in Social Studies	# of *lessons/hands-on activities* for targeting LCD domain skills in Social Studies
LCD Total objectives (26)	24 of 26	2 of 26	26	0 of 26	26 of 26	0
A. Listening Comprehension Skills						
II.A.1. Child shows understanding by responding appropriately.	X					
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.	X					
II.A.3. Child shows understanding of the language being spoken by teachers and peers.	X					
B. Speaking (Conversation) Skills						
II.B.1. Child is able to use language for different purposes.	X					
II.B.2. Child engages in conversations in appropriate ways.	X					
II.B.3. Child provides appropriate information for various situations.	X					

II.B.4. Child demonstrates knowledge of verbal conversational rules.	X					
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.	X					
II.B.6. Child matches language to social contexts.	X					
C. Speech Production Skills						
II.C.1. Child's speech is understood by both the teacher and other adults in the school.	X					
II.C.2. Child perceives differences between similar sounding words.						
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.						
D. Vocabulary Skills						
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.	X					
II.D.2. Child demonstrates understanding of terms used in the instructional language of the classroom.	X					
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.	X					
II.D.4. Child uses a large speaking vocabulary, adding several new	X					

words daily.						
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.	X					
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)	X					
E. Sentences and Structure Skills						
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.	X					
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.	X					
II.E.3. Child uses sentences with more than one phrase.	X					
II.E.4. Child combines more than one idea using complex sentences.	X					
II.E.5. Child combines sentences that give lots of detail, sticks to the topic, and clearly communicates intended meaning.	X					
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.	X					
II.E.7. Child uses single words and simple phrases to communicate	X					

meaning in social situations.						
II.E.8. Child attempts to use new vocabulary and grammar in speech.	X					

Note. X indicates objective found; blank indicates no objective found.

Table C3b

PK Third Nine Weeks for Reading and Social Studies Aligned to TEA PK Guidelines Social/Emotional Development Domain

TEA PK Guidelines I. Social/Emotional Development Domain (SD)	PK Reading and Social Studies Scope & Sequence Third Nine Weeks					
	Total SD objectives found in **Reading**	#of SD objectives not addressed explicitly in Reading	# of *instructional practices* for targeting SD skills in Reading	**Total** SD objectives found in **Social Studies**	# of SD objectives skills not addressed explicitly in Social Studies	# of *lessons/hands-on activities* for targeting SD domain skills in Social Studies
SD Total objectives (20)	0 of 20	20 of 20	26	0 of 20	20 of 20	0
A. Self-Concept Skills						
I.A.1. Child is aware of where own body is in space and respects personal boundaries.						
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.						
I.A.3. Child shows reasonable opinion of his own abilities and limitations.						
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.						
B. Self-Regulation Skills 1. Behavior Control						
I.B.1.a. Child follows classroom rules and routines with occasional reminders.						
I.B.1.b. Child takes care of and manages classroom materials.						
I.B.1.c. Child regulates his own						

behavior with occasional reminders or assistance from teacher.						
B. Self-Regulation Skills 2. Emotional Control						
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.						
I.B.2.b. Child can communicate basic emotions/feelings.						
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.						
B. Self-Regulation Skills 3. Control of Attention						
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.						
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.						
C. Relationships with Others						
I.C.1. Child uses effective verbal and nonverbal communication skills to build relationships with teachers/adults.						
I.C.2. Child assumes various roles and responsibilities as part of a classroom community.						
I.C.3. Child shows competence in initiating social interactions.						
I.C.4. Child increasingly interacts						

and communicates with peers to initiate pretend play scenarios that share a common plan and goal.						
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.						
I.C.6. Child demonstrates empathy and caring for others.						
I.C.7. Child interacts with a variety of playmates and may have preferred friends.						
D. Social Awareness Skills						
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.						

Note. X indicates objective found; blank indicates no objective found.

Table C4a

PK Fourth Nine Weeks Scope & Sequence for Reading and Social Studies Aligned to TEA PK Guidelines Language/Communication Domain

TEA PK Guidelines II. Language & Communication Domain (LCD)	PK Reading and Social Studies Scope & Sequence Fourth Nine Weeks					
	Total LCD objectives found in **Reading**	#of LCD objectives not addressed explicitly in Reading	# of *instructional practices* for targeting LCD skills in Reading	**Total** LCD objectives found in **Social Studies**	# of LCD objectives skills not addressed explicitly in Social Studies	# of *lessons/hands-on activities* for targeting LCD skills in Social Studies
LCD Total objectives (26)	24 of 26	2 of 26	25	0 of 26	26 of 26	0
A. Listening Comprehension Skills						
II.A.1. Child shows understanding by responding appropriately.	X					
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.	X					
II.A.3. Child shows understanding of the language being spoken by teachers and peers.	X					
B. Speaking (Conversation) Skills						
II.B.1. Child is able to use language for different purposes.	X					
II.B.2. Child engages in conversations in appropriate ways.	X					
II.B.3. Child provides appropriate	X					

information for various situations.						
II.B.4. Child demonstrates knowledge of verbal conversational rules.	X					
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.	X					
II.B.6. Child matches language to social contexts.	X					
C. Speech Production Skills						
II.C.1. Child's speech is understood by both the teacher and other adults in the school.	X					
II.C.2. Child perceives differences between similar sounding words.						
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.						
D. Vocabulary Skills						
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.	X					
II.D.2. Child demonstrates understanding of terms used in the instructional language of the classroom.	X					
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.	X					
II.D.4. Child uses a large speaking	X					

vocabulary, adding several new words daily.						
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.	X					
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)	X					
E. Sentences and Structure Skills						
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.	X					
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.	X					
II.E.3. Child uses sentences with more than one phrase.	X					
II.E.4. Child combines more than one idea using complex sentences.	X					
II.E.5. Child combines sentences that give lots of detail, sticks to the topic, and clearly communicates intended meaning.	X					
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.	X					
II.E.7. Child uses single words and	X					

simple phrases to communicate meaning in social situations.						
II.E.8. Child attempts to use new vocabulary and grammar in speech.	X					

Note. X indicates objective found; blank indicates no objective found.

Table C4b

PK Fourth Nine Weeks Scope & Sequence for Reading and Social Studies Aligned to TEA PK Guidelines Social/Emotional Development Domain

TEA PK Guidelines I. Social/Emotional Development Domain (SD)	PK Reading and Social Studies Scope & Sequence Fourth Nine Weeks					
	Total SD objectives found in **Reading**	#of SD objectives not addressed explicitly in Reading	# of *instructional practices* for targeting SD skills in Reading	**Total** SD objectives found in **Social Studies**	# of SD objectives skills not addressed explicitly in Social Studies	# of *lessons/hands-on activities* for targeting SD skills in Social Studies
SD Total objectives (20)	0 of 20	20 of 20	25	0 of 20	20 of 20	0
A. Self-Concept Skills						
I.A.1. Child is aware of where own body is in space and respects personal boundaries.						
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.						
I.A.3. Child shows reasonable opinion of his own abilities and limitations.						
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.						
B. Self-Regulation Skills 1. Behavior Control						
I.B.1.a. Child follows classroom rules and routines with occasional reminders.						
I.B.1.b. Child takes care of and manages classroom materials.						

I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.						
B. Self-Regulation Skills 2. Emotional Control						
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.						
I.B.2.b. Child can communicate basic emotions/feelings.						
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.						
B. Self-Regulation Skills 3. Control of Attention						
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.						
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.						
C. Relationships with Others						
I.C.1. Child uses effective verbal and nonverbal communication skills to build relationships with teachers/adults.						
I.C.2. Child assumes various roles and responsibilities as part of a classroom community.						
I.C.3. Child shows competence in initiating social interactions.						

I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that share a common plan and goal.						
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.						
I.C.6. Child demonstrates empathy and caring for others.						
I.C.7. Child interacts with a variety of playmates and may have preferred friends.						
D. Social Awareness Skills						
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.						

Note. X indicates objective found; blank indicates no objective found.

Table C5a

PPCD Reading Scope & Sequence Aligned to TEA PK Guidelines for Social and Language Domains for August

TEA PK Guidelines I. Social/Emotional Development Domain	PPCD August Scope & Sequence Reading					
	Total activities in the drive	#of activities with objectives	# of activities **without** any objectives	#of activities matching domain skills	# of activities do not match the domain skills	
Objectives	5	4	1	**0**	5	Due to 0 activities matching the domain skills, NA for completion of the rest of the table
A. Self-Concept Skills						
I.A.1. Child is aware of where own body is in space and respects personal boundaries.						
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.						
I.A.3. Child shows reasonable opinion of his own abilities and limitations.						
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.						
B. Self-Regulation Skills 1. Behavior Control						
I.B.1.a. Child follows classroom rules						

and routines with occasional reminders.						
I.B.1.b. Child takes care of and manages classroom materials.						
I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.						
B. Self-Regulation Skills 2. Emotional Control						
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.						
I.B.2.b. Child can communicate basic emotions/feelings.						
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.						
B. Self-Regulation Skills 3. Control of Attention						
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.						
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.						
C. Relationships with Others						
I.C.1. Child uses effective verbal and non-verbal communication skills to build relationships with teachers/adults.						
I.C.2. Child assumes various roles						

and responsibilities as part of a classroom community.						
I.C.3. Child shows competence in initiating social interactions.						
I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that share a common plan and goal.						
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.						
I.C.6. Child demonstrates empathy and caring for others.						
I.C.7. Child interacts with a variety of playmates and may have preferred friends.						
D. Social Awareness Skills						
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.						
PK Guidelines II. Language and Communication Domain						
A. Listening Comprehension Skills						
II.A.1. Child shows understanding by responding appropriately.						
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.						
II.A.3. Child shows understanding of the language being spoken by						

teachers and peers.						
B. Speaking (Conversation) Skills						
II.B.1. Child is able to use language for different purposes.						
II.B.2. Child engages in conversations in appropriate ways.						
II.B.3. Child provides appropriate information for various situations.						
II.B.4. Child demonstrates knowledge of verbal conversational rules.						
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.						
II.B.6. Child matches language to social contexts.						
C. Speech Production Skills						
II.C.1. Child's speech is understood by both the teacher and other adults in the school.						
II.C.2. Child perceives differences between similar sounding words.						
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.						
D. Vocabulary Skills						
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.						
II.D.2. Child demonstrates understanding of terms used in the instructional language of the						

classroom.						
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.						
II.D.4. Child uses a large speaking vocabulary, adding several new words daily.						
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.						
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)						
E. Sentences and Structure Skills						
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.						
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.						
II.E.3. Child uses sentences with more than one phrase.						
II.E.4. Child combines more than one idea using complex sentences.						
II.E.5. Child combines sentences that give lots of detail, sticks to the						

topic, and clearly communicates intended meaning.						
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.						
II.E.7. Child uses single words and simple phrases to communicate meaning in social situations.						
II.E.8. Child attempts to use new vocabulary and grammar in speech.						

Note. X indicates objective found; blank indicates no objective found.

Table C5b

PPCD Social Studies/Science Scope & Sequence Aligned to TEA PK Guidelines for Social and Language Domains for August

TEA PK Guidelines I. Social/Emotional Development Domain	PPCD August Scope & Sequence Social Studies/Science					
	Total activities in the drive	#of activities with objectives	# of activities **without** any objectives	#of activities matching domain skills	# of activities do not match the domain skills	
Objectives	3	2	1	**0**	3	Due to 0 activities matching the domain skills, NA for completion of the rest of the table
A. Self-Concept Skills						
I.A.1. Child is aware of where own body is in space and respects personal boundaries.						
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.						
I.A.3. Child shows reasonable opinion of his own abilities and limitations.						
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.						
B. Self-Regulation Skills 1. Behavior Control						
I.B.1.a. Child follows classroom rules						

and routines with occasional reminders.						
I.B.1.b. Child takes care of and manages classroom materials.						
I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.						
B. Self-Regulation Skills 2. Emotional Control						
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.						
I.B.2.b. Child can communicate basic emotions/feelings.						
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.						
B. Self-Regulation Skills 3. Control of Attention						
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.						
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.						
C. Relationships with Others						
I.C.1. Child uses effective verbal and non-verbal communication skills to build relationships with teachers/adults.						
I.C.2. Child assumes various roles						

and responsibilities as part of a classroom community.						
I.C.3. Child shows competence in initiating social interactions.						
I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that share a common plan and goal.						
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.						
I.C.6. Child demonstrates empathy and caring for others.						
I.C.7. Child interacts with a variety of playmates and may have preferred friends.						
D. Social Awareness Skills						
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.						
PK Guidelines II. Language and Communication Domain						
A. Listening Comprehension Skills						
II.A.1. Child shows understanding by responding appropriately.						
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.						
II.A.3. Child shows understanding of the language being spoken by						

teachers and peers.						
B. Speaking (Conversation) Skills						
II.B.1. Child is able to use language for different purposes.						
II.B.2. Child engages in conversations in appropriate ways.						
II.B.3. Child provides appropriate information for various situations.						
II.B.4. Child demonstrates knowledge of verbal conversational rules.						
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.						
II.B.6. Child matches language to social contexts.						
C. Speech Production Skills						
II.C.1. Child's speech is understood by both the teacher and other adults in the school.						
II.C.2. Child perceives differences between similar sounding words.						
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.						
D. Vocabulary Skills						
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.						
II.D.2. Child demonstrates understanding of terms used in the instructional language of the						

classroom.						
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.						
II.D.4. Child uses a large speaking vocabulary, adding several new words daily.						
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.						
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)						
E. Sentences and Structure Skills						
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.						
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.						
II.E.3. Child uses sentences with more than one phrase.						
II.E.4. Child combines more than one idea using complex sentences.						
II.E.5. Child combines sentences that give lots of detail, sticks to the						

topic, and clearly communicates intended meaning.						
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.						
II.E.7. Child uses single words and simple phrases to communicate meaning in social situations.						
II.E.8. Child attempts to use new vocabulary and grammar in speech.						

Note. X indicates objective found; blank indicates no objective found.

Table C6a

PPCD Reading Scope & Sequence Aligned to TEA PK Guidelines for Social and Language Domains for September

TEA PK Guidelines I. Social/Emotional Development Domain	PPCD September Scope & Sequence Reading				
	Total activities in the drive	#of activities with objectives	# of activities **without** any objectives	#of activities matching domain skills	# of activities do not match the domain skills
Objectives	12	11	1	**6**	6
A. Self-Concept Skills					
I.A.1. Child is aware of where own body is in space and respects personal boundaries.					
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.					
I.A.3. Child shows reasonable opinion of his own abilities and limitations.					
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.					
B. Self-Regulation Skills 1. Behavior Control					
I.B.1.a. Child follows classroom rules and routines with occasional reminders.	X				
I.B.1.b. Child takes care of and manages classroom materials.	X				
I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.					
B. Self-Regulation Skills 2.					

Emotional Control					
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.					
I.B.2.b. Child can communicate basic emotions/feelings.					
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.					
B. Self-Regulation Skills 3. Control of Attention					
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.					
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.					
C. Relationships with Others					
I.C.1. Child uses effective verbal and non-verbal communication skills to build relationships with teachers/adults.					
I.C.2. Child assumes various roles and responsibilities as part of a classroom community.					
I.C.3. Child shows competence in initiating social interactions.					
I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that share a common plan and goal.					

I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.					
I.C.6. Child demonstrates empathy and caring for others.					
I.C.7. Child interacts with a variety of playmates and may have preferred friends.					
D. Social Awareness Skills					
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.					
PK Guidelines II. Language and Communication Domain					
A. Listening Comprehension Skills					
II.A.1. Child shows understanding by responding appropriately.	X				
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.					
II.A.3. Child shows understanding of the language being spoken by teachers and peers.					
B. Speaking (Conversation) Skills					
II.B.1. Child is able to use language for different purposes.	X				
II.B.2. Child engages in conversations in appropriate ways.					
II.B.3. Child provides appropriate information for various situations.					

II.B.4. Child demonstrates knowledge of verbal conversational rules.					
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.					
II.B.6. Child matches language to social contexts.					
C. Speech Production Skills					
II.C.1. Child's speech is understood by both the teacher and other adults in the school.					
II.C.2. Child perceives differences between similar sounding words.					
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.					
D. Vocabulary Skills					
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.					
II.D.2. Child demonstrates understanding of terms used in the instructional language of the classroom.					
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.					
II.D.4. Child uses a large speaking vocabulary, adding several new					

words daily.					
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.					
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)					
E. Sentences and Structure Skills					
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.					
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.					
II.E.3. Child uses sentences with more than one phrase.					
II.E.4. Child combines more than one idea using complex sentences.					
II.E.5. Child combines sentences that give lots of detail, sticks to the topic, and clearly communicates intended meaning.					
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.					
II.E.7. Child uses single words and simple phrases to communicate					

meaning in social situations.					
II.E.8. Child attempts to use new vocabulary and grammar in speech.					

Note. X indicates objective found; blank indicates no objective found.

Table C6b

PPCD Social Studies/Science Scope & Sequence Aligned to TEA PK Guidelines for Social and Language Domains for September

TEA PK Guidelines I. Social/Emotional Development Domain	PPCD September Scope & Sequence Social Studies/Science				
	Total activities in the drive	#of activities with objectives	# of activities **without** any objectives	#of activities matching domain skills	# of activities do not match the domain skills
Objectives	7	6	1	**4**	3
A. Self-Concept Skills					
I.A.1. Child is aware of where own body is in space and respects personal boundaries.					
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.					
I.A.3. Child shows reasonable opinion of his own abilities and limitations.					
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.					
B. Self-Regulation Skills 1. Behavior Control					
I.B.1.a. Child follows classroom rules and routines with occasional reminders.	X				
I.B.1.b. Child takes care of and manages classroom materials.	X				
I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.					

B. Self-Regulation Skills 2. Emotional Control					
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.					
I.B.2.b. Child can communicate basic emotions/feelings.					
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.					
B. Self-Regulation Skills 3. Control of Attention					
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.					
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.					
C. Relationships with Others					
I.C.1. Child uses effective verbal and non-verbal communication skills to build relationships with teachers/adults.					
I.C.2. Child assumes various roles and responsibilities as part of a classroom community.					
I.C.3. Child shows competence in initiating social interactions.					
I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that					

share a common plan and goal.					
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.					
I.C.6. Child demonstrates empathy and caring for others.					
I.C.7. Child interacts with a variety of playmates and may have preferred friends.					
D. Social Awareness Skills					
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.					
PK Guidelines II. Language and Communication Domain					
A. Listening Comprehension Skills					
II.A.1. Child shows understanding by responding appropriately.	X				
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.					
II.A.3. Child shows understanding of the language being spoken by teachers and peers.					
B. Speaking (Conversation) Skills					
II.B.1. Child is able to use language for different purposes.					
II.B.2. Child engages in conversations in appropriate ways.					
II.B.3. Child provides appropriate					

information for various situations.					
II.B.4. Child demonstrates knowledge of verbal conversational rules.					
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.					
II.B.6. Child matches language to social contexts.					
C. Speech Production Skills					
II.C.1. Child's speech is understood by both the teacher and other adults in the school.					
II.C.2. Child perceives differences between similar sounding words.					
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.					
D. Vocabulary Skills					
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.					
II.D.2. Child demonstrates understanding of terms used in the instructional language of the classroom.					
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.					
II.D.4. Child uses a large speaking					

vocabulary, adding several new words daily.					
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.					
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)					
E. Sentences and Structure Skills					
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.					
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.					
II.E.3. Child uses sentences with more than one phrase.					
II.E.4. Child combines more than one idea using complex sentences.					
II.E.5. Child combines sentences that give lots of detail, sticks to the topic, and clearly communicates intended meaning.					
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.					
II.E.7. Child uses single words and					

simple phrases to communicate meaning in social situations.					
II.E.8. Child attempts to use new vocabulary and grammar in speech.					

Note. X indicates objective found; blank indicates no objective found.

Table C7a

PPCD Reading Scope & Sequence Aligned to TEA PK Guidelines for Social and Language Domains for October

TEA PK Guidelines I. Social/Emotional Development Domain	PPCD October Scope & Sequence Reading				
	Total activities in the drive	#of activities with objectives	# of activities **without** any objectives	#of activities matching domain skills	# of activities do not match the domain skills
Objectives	19	18	1	**9**	10
A. Self-Concept Skills					
I.A.1. Child is aware of where own body is in space and respects personal boundaries.					
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.					
I.A.3. Child shows reasonable opinion of his own abilities and limitations.					
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.					
B. Self-Regulation Skills 1. Behavior Control					
I.B.1.a. Child follows classroom rules and routines with occasional reminders.					
I.B.1.b. Child takes care of and manages classroom materials.					
I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.					

B. Self-Regulation Skills 2. Emotional Control					
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.	X				
I.B.2.b. Child can communicate basic emotions/feelings.	X				
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.					
B. Self-Regulation Skills 3. Control of Attention					
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.					
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.					
C. Relationships with Others					
I.C.1. Child uses effective verbal and non-verbal communication skills to build relationships with teachers/adults.					
I.C.2. Child assumes various roles and responsibilities as part of a classroom community.					
I.C.3. Child shows competence in initiating social interactions.					
I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that					

share a common plan and goal.					
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.					
I.C.6. Child demonstrates empathy and caring for others.					
I.C.7. Child interacts with a variety of playmates and may have preferred friends.					
D. Social Awareness Skills					
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.					
PK Guidelines II. Language and Communication Domain					
A. Listening Comprehension Skills					
II.A.1. Child shows understanding by responding appropriately.	X				
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.					
II.A.3. Child shows understanding of the language being spoken by teachers and peers.					
B. Speaking (Conversation) Skills					
II.B.1. Child is able to use language for different purposes.					
II.B.2. Child engages in conversations in appropriate ways.					
II.B.3. Child provides appropriate					

information for various situations.					
II.B.4. Child demonstrates knowledge of verbal conversational rules.					
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.					
II.B.6. Child matches language to social contexts.					
C. Speech Production Skills					
II.C.1. Child's speech is understood by both the teacher and other adults in the school.					
II.C.2. Child perceives differences between similar sounding words.					
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.					
D. Vocabulary Skills					
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.	X				
II.D.2. Child demonstrates understanding of terms used in the instructional language of the classroom.					
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.					
II.D.4. Child uses a large speaking					

vocabulary, adding several new words daily.					
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.					
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)					
E. Sentences and Structure Skills					
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.					
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.					
II.E.3. Child uses sentences with more than one phrase.					
II.E.4. Child combines more than one idea using complex sentences.					
II.E.5. Child combines sentences that give lots of detail, sticks to the topic, and clearly communicates intended meaning.					
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.					
II.E.7. Child uses single words and					

simple phrases to communicate meaning in social situations.					
II.E.8. Child attempts to use new vocabulary and grammar in speech.					

Note. X indicates objective found; blank indicates no objective found.

Table C7b

PPCD Social Studies/Science Scope & Sequence Aligned to TEA PK Guidelines for Social and Language Domains for October

TEA PK Guidelines I. Social/Emotional Development Domain	PPCD October Scope & Sequence Social Studies/Science				
	Total activities in the drive	#of activities with objectives	# of activities **without** any objectives	#of activities matching domain skills	# of activities do not match the domain skills
Objectives	7	7	0	**6**	1
A. Self-Concept Skills					
I.A.1. Child is aware of where own body is in space and respects personal boundaries.					
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.					
I.A.3. Child shows reasonable opinion of his own abilities and limitations.					
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.	X				
B. Self-Regulation Skills 1. Behavior Control					
I.B.1.a. Child follows classroom rules and routines with occasional reminders.	X				
I.B.1.b. Child takes care of and manages classroom materials.	X				
I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.					

B. Self-Regulation Skills 2. Emotional Control					
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.					
I.B.2.b. Child can communicate basic emotions/feelings.					
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.					
B. Self-Regulation Skills 3. Control of Attention					
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.					
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.					
C. Relationships with Others					
I.C.1. Child uses effective verbal and non-verbal communication skills to build relationships with teachers/adults.					
I.C.2. Child assumes various roles and responsibilities as part of a classroom community.					
I.C.3. Child shows competence in initiating social interactions.					
I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that					

share a common plan and goal.					
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.					
I.C.6. Child demonstrates empathy and caring for others.					
I.C.7. Child interacts with a variety of playmates and may have preferred friends.					
D. Social Awareness Skills					
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.					
PK Guidelines II. Language and Communication Domain					
A. Listening Comprehension Skills					
II.A.1. Child shows understanding by responding appropriately.	X				
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.					
II.A.3. Child shows understanding of the language being spoken by teachers and peers.					
B. Speaking (Conversation) Skills					
II.B.1. Child is able to use language for different purposes.	X				
II.B.2. Child engages in conversations in appropriate ways.					
II.B.3. Child provides appropriate					

information for various situations.					
II.B.4. Child demonstrates knowledge of verbal conversational rules.					
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.					
II.B.6. Child matches language to social contexts.					
C. Speech Production Skills					
II.C.1. Child's speech is understood by both the teacher and other adults in the school.					
II.C.2. Child perceives differences between similar sounding words.					
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.					
D. Vocabulary Skills					
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.					
II.D.2. Child demonstrates understanding of terms used in the instructional language of the classroom.					
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.					
II.D.4. Child uses a large speaking					

vocabulary, adding several new words daily.					
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.					
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)					
E. Sentences and Structure Skills					
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.					
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.					
II.E.3. Child uses sentences with more than one phrase.					
II.E.4. Child combines more than one idea using complex sentences.					
II.E.5. Child combines sentences that give lots of detail, sticks to the topic, and clearly communicates intended meaning.					
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.					
II.E.7. Child uses single words and					

simple phrases to communicate meaning in social situations.					
II.E.8. Child attempts to use new vocabulary and grammar in speech.					

Note. X indicates objective found; blank indicates no objective found.

Table C8a

PPCD Reading Scope & Sequence Aligned to TEA PK Guidelines for Social and Language Domains for November

TEA PK Guidelines I. Social/Emotional Development Domain	PPCD November Scope & Sequence Reading				
	Total activities in the drive	#of activities with objectives	# of activities **without** any objectives	#of activities matching domain skills	# of activities do not match the domain skills
Objectives	6	6	0	**1**	5
A. Self-Concept Skills					
I.A.1. Child is aware of where own body is in space and respects personal boundaries.					
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.					
I.A.3. Child shows reasonable opinion of his own abilities and limitations.					
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.					
B. Self-Regulation Skills 1. Behavior Control					
I.B.1.a. Child follows classroom rules and routines with occasional reminders.	X				
I.B.1.b. Child takes care of and manages classroom materials.	X				
I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.					

B. Self-Regulation Skills 2. Emotional Control					
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.					
I.B.2.b. Child can communicate basic emotions/feelings.					
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.					
B. Self-Regulation Skills 3. Control of Attention					
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.					
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.					
C. Relationships with Others					
I.C.1. Child uses effective verbal and non-verbal communication skills to build relationships with teachers/adults.	X				
I.C.2. Child assumes various roles and responsibilities as part of a classroom community.					
I.C.3. Child shows competence in initiating social interactions.	X				
I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that					

share a common plan and goal.					
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.					
I.C.6. Child demonstrates empathy and caring for others.					
I.C.7. Child interacts with a variety of playmates and may have preferred friends.					
D. Social Awareness Skills					
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.					
PK Guidelines II. Language and Communication Domain					
A. Listening Comprehension Skills					
II.A.1. Child shows understanding by responding appropriately.	X				
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.					
II.A.3. Child shows understanding of the language being spoken by teachers and peers.					
B. Speaking (Conversation) Skills					
II.B.1. Child is able to use language for different purposes.					
II.B.2. Child engages in conversations in appropriate ways.					
II.B.3. Child provides appropriate					

information for various situations.					
II.B.4. Child demonstrates knowledge of verbal conversational rules.					
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.					
II.B.6. Child matches language to social contexts.					
C. Speech Production Skills					
II.C.1. Child's speech is understood by both the teacher and other adults in the school.					
II.C.2. Child perceives differences between similar sounding words.					
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.					
D. Vocabulary Skills					
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.					
II.D.2. Child demonstrates understanding of terms used in the instructional language of the classroom.					
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.					
II.D.4. Child uses a large speaking					

vocabulary, adding several new words daily.					
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.					
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)					
E. Sentences and Structure Skills					
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.					
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.					
II.E.3. Child uses sentences with more than one phrase.					
II.E.4. Child combines more than one idea using complex sentences.					
II.E.5. Child combines sentences that give lots of detail, sticks to the topic, and clearly communicates intended meaning.					
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.					
II.E.7. Child uses single words and					

simple phrases to communicate meaning in social situations.					
II.E.8. Child attempts to use new vocabulary and grammar in speech.					

Note. X indicates objective found; blank indicates no objective found.

Table C8b

PPCD Social Studies/Science Scope & Sequence Aligned to TEA PK Guidelines for Social and Language Domains for November

TEA PK Guidelines I. Social/Emotional Development Domain	PPCD November Scope & Sequence Social Studies/Science				
	Total activities in the drive	#of activities with objectives	# of activities **without** any objectives	#of activities matching domain skills	# of activities do not match the domain skills
Objectives	5	4	1	**4**	1
A. Self-Concept Skills					
I.A.1. Child is aware of where own body is in space and respects personal boundaries.					
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.					
I.A.3. Child shows reasonable opinion of his own abilities and limitations.					
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.					
B. Self-Regulation Skills 1. Behavior Control					
I.B.1.a. Child follows classroom rules and routines with occasional reminders.	X				
I.B.1.b. Child takes care of and manages classroom materials.	X				
I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.					

B. Self-Regulation Skills 2. Emotional Control					
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.					
I.B.2.b. Child can communicate basic emotions/feelings.					
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.					
B. Self-Regulation Skills 3. Control of Attention					
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.	X				
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.	X				
C. Relationships with Others					
I.C.1. Child uses effective verbal and non-verbal communication skills to build relationships with teachers/adults.					
I.C.2. Child assumes various roles and responsibilities as part of a classroom community.					
I.C.3. Child shows competence in initiating social interactions.					
I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that					

share a common plan and goal.					
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.					
I.C.6. Child demonstrates empathy and caring for others.					
I.C.7. Child interacts with a variety of playmates and may have preferred friends.					
D. Social Awareness Skills					
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.					
PK Guidelines II. Language and Communication Domain					
A. Listening Comprehension Skills					
II.A.1. Child shows understanding by responding appropriately.	X				
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.					
II.A.3. Child shows understanding of the language being spoken by teachers and peers.					
B. Speaking (Conversation) Skills					
II.B.1. Child is able to use language for different purposes.	X				
II.B.2. Child engages in conversations in appropriate ways.					
II.B.3. Child provides appropriate					

information for various situations.					
II.B.4. Child demonstrates knowledge of verbal conversational rules.					
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.					
II.B.6. Child matches language to social contexts.					
C. Speech Production Skills					
II.C.1. Child's speech is understood by both the teacher and other adults in the school.					
II.C.2. Child perceives differences between similar sounding words.					
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.					
D. Vocabulary Skills					
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.	X				
II.D.2. Child demonstrates understanding of terms used in the instructional language of the classroom.	X				
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.					
II.D.4. Child uses a large speaking					

vocabulary, adding several new words daily.					
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.					
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)					
E. Sentences and Structure Skills					
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.					
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.					
II.E.3. Child uses sentences with more than one phrase.					
II.E.4. Child combines more than one idea using complex sentences.					
II.E.5. Child combines sentences that give lots of detail, sticks to the topic, and clearly communicates intended meaning.					
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.					
II.E.7. Child uses single words and					

simple phrases to communicate meaning in social situations.					
II.E.8. Child attempts to use new vocabulary and grammar in speech.					

Note. X indicates objective found; blank indicates no objective found.

Table C9a

PPCD Reading Scope & Sequence Aligned to TEA PK Guidelines for Social and Language Domains for December

TEA PK Guidelines I. Social/Emotional Development Domain	PPCD December Scope & Sequence Reading				
	Total activities in the drive	#of activities with objectives	# of activities **without** any objectives	#of activities matching domain skills	# of activities do not match the domain skills
Objectives	7	6	1	**2**	5
A. Self-Concept Skills					
I.A.1. Child is aware of where own body is in space and respects personal boundaries.					
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.					
I.A.3. Child shows reasonable opinion of his own abilities and limitations.					
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.					
B. Self-Regulation Skills 1. Behavior Control					
I.B.1.a. Child follows classroom rules and routines with occasional reminders.	X				
I.B.1.b. Child takes care of and manages classroom materials.	X				
I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.					

B. Self-Regulation Skills 2. Emotional Control					
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.					
I.B.2.b. Child can communicate basic emotions/feelings.					
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.					
B. Self-Regulation Skills 3. Control of Attention					
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.					
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.					
C. Relationships with Others					
I.C.1. Child uses effective verbal and non-verbal communication skills to build relationships with teachers/adults.					
I.C.2. Child assumes various roles and responsibilities as part of a classroom community.					
I.C.3. Child shows competence in initiating social interactions.	X				
I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that					

share a common plan and goal.					
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.					
I.C.6. Child demonstrates empathy and caring for others.					
I.C.7. Child interacts with a variety of playmates and may have preferred friends.					
D. Social Awareness Skills					
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.					
PK Guidelines II. Language and Communication Domain					
A. Listening Comprehension Skills					
II.A.1. Child shows understanding by responding appropriately.	X				
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.					
II.A.3. Child shows understanding of the language being spoken by teachers and peers.					
B. Speaking (Conversation) Skills					
II.B.1. Child is able to use language for different purposes.	X				
II.B.2. Child engages in conversations in appropriate ways.					
II.B.3. Child provides appropriate					

information for various situations.					
II.B.4. Child demonstrates knowledge of verbal conversational rules.					
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.					
II.B.6. Child matches language to social contexts.					
C. Speech Production Skills					
II.C.1. Child's speech is understood by both the teacher and other adults in the school.					
II.C.2. Child perceives differences between similar sounding words.					
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.					
D. Vocabulary Skills					
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.					
II.D.2. Child demonstrates understanding of terms used in the instructional language of the classroom.					
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.					
II.D.4. Child uses a large speaking					

vocabulary, adding several new words daily.					
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.					
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)					
E. Sentences and Structure Skills					
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.					
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.					
II.E.3. Child uses sentences with more than one phrase.					
II.E.4. Child combines more than one idea using complex sentences.					
II.E.5. Child combines sentences that give lots of detail, sticks to the topic, and clearly communicates intended meaning.					
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.					
II.E.7. Child uses single words and					

simple phrases to communicate meaning in social situations.					
II.E.8. Child attempts to use new vocabulary and grammar in speech.					

Note. X indicates objective found; blank indicates no objective found.

Table C9b

PPCD Social Studies/Science Scope & Sequence Aligned to TEA PK Guidelines for Social and Language Domains for December

TEA PK Guidelines I. Social/Emotional Development Domain	PPCD December Scope & Sequence Social Studies/Science				
	Total activities in the drive	#of activities with objectives	# of activities **without** any objectives	#of activities matching domain skills	# of activities do not match the domain skills
Objectives	2	2	0	**2**	0
A. Self-Concept Skills					
I.A.1. Child is aware of where own body is in space and respects personal boundaries.					
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.					
I.A.3. Child shows reasonable opinion of his own abilities and limitations.					
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.					
B. Self-Regulation Skills 1. Behavior Control					
I.B.1.a. Child follows classroom rules and routines with occasional reminders.					
I.B.1.b. Child takes care of and manages classroom materials.	X				
I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.					

B. Self-Regulation Skills 2. Emotional Control					
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.					
I.B.2.b. Child can communicate basic emotions/feelings.					
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.					
B. Self-Regulation Skills 3. Control of Attention					
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.					
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.	X				
C. Relationships with Others					
I.C.1. Child uses effective verbal and non-verbal communication skills to build relationships with teachers/adults.					
I.C.2. Child assumes various roles and responsibilities as part of a classroom community.					
I.C.3. Child shows competence in initiating social interactions.					
I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that					

share a common plan and goal.					
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.					
I.C.6. Child demonstrates empathy and caring for others.					
I.C.7. Child interacts with a variety of playmates and may have preferred friends.					
D. Social Awareness Skills					
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.					
PK Guidelines II. Language and Communication Domain					
A. Listening Comprehension Skills					
II.A.1. Child shows understanding by responding appropriately.					
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.					
II.A.3. Child shows understanding of the language being spoken by teachers and peers.					
B. Speaking (Conversation) Skills					
II.B.1. Child is able to use language for different purposes.	X				
II.B.2. Child engages in conversations in appropriate ways.					
II.B.3. Child provides appropriate					

information for various situations.					
II.B.4. Child demonstrates knowledge of verbal conversational rules.					
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.					
II.B.6. Child matches language to social contexts.					
C. Speech Production Skills					
II.C.1. Child's speech is understood by both the teacher and other adults in the school.					
II.C.2. Child perceives differences between similar sounding words.					
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.					
D. Vocabulary Skills					
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.					
II.D.2. Child demonstrates understanding of terms used in the instructional language of the classroom.					
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.					
II.D.4. Child uses a large speaking					

vocabulary, adding several new words daily.					
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.					
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)					
E. Sentences and Structure Skills					
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.					
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.					
II.E.3. Child uses sentences with more than one phrase.					
II.E.4. Child combines more than one idea using complex sentences.					
II.E.5. Child combines sentences that give lots of detail, sticks to the topic, and clearly communicates intended meaning.					
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.					
II.E.7. Child uses single words and					

simple phrases to communicate meaning in social situations.					
II.E.8. Child attempts to use new vocabulary and grammar in speech.					

Note. X indicates objective found; blank indicates no objective found.

Table C10a

PPCD Reading Scope & Sequence Aligned to TEA PK Guidelines for Social and Language Domains for January

TEA PK Guidelines I. Social/Emotional Development Domain	PPCD January Scope & Sequence Reading				
	Total activities in the drive	#of activities with objectives	# of activities **without** any objectives	#of activities matching domain skills	# of activities do not match the domain skills
Objectives	10	10	0	**2**	8
A. Self-Concept Skills					
I.A.1. Child is aware of where own body is in space and respects personal boundaries.					
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.					
I.A.3. Child shows reasonable opinion of his own abilities and limitations.					
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.					
B. Self-Regulation Skills 1. Behavior Control					
I.B.1.a. Child follows classroom rules and routines with occasional reminders.					
I.B.1.b. Child takes care of and manages classroom materials.	X				
I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.					

B. Self-Regulation Skills 2. Emotional Control					
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.					
I.B.2.b. Child can communicate basic emotions/feelings.					
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.					
B. Self-Regulation Skills 3. Control of Attention					
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.					
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.	X				
C. Relationships with Others					
I.C.1. Child uses effective verbal and non-verbal communication skills to build relationships with teachers/adults.					
I.C.2. Child assumes various roles and responsibilities as part of a classroom community.					
I.C.3. Child shows competence in initiating social interactions.					
I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that					

share a common plan and goal.					
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.					
I.C.6. Child demonstrates empathy and caring for others.					
I.C.7. Child interacts with a variety of playmates and may have preferred friends.					
D. Social Awareness Skills					
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.					
PK Guidelines II. Language and Communication Domain					
A. Listening Comprehension Skills					
II.A.1. Child shows understanding by responding appropriately.	X				
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.					
II.A.3. Child shows understanding of the language being spoken by teachers and peers.					
B. Speaking (Conversation) Skills					
II.B.1. Child is able to use language for different purposes.					
II.B.2. Child engages in conversations in appropriate ways.					
II.B.3. Child provides appropriate					

information for various situations.					
II.B.4. Child demonstrates knowledge of verbal conversational rules.					
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.					
II.B.6. Child matches language to social contexts.					
C. Speech Production Skills					
II.C.1. Child's speech is understood by both the teacher and other adults in the school.					
II.C.2. Child perceives differences between similar sounding words.					
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.					
D. Vocabulary Skills					
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.					
II.D.2. Child demonstrates understanding of terms used in the instructional language of the classroom.					
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.					
II.D.4. Child uses a large speaking					

vocabulary, adding several new words daily.					
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.					
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)					
E. Sentences and Structure Skills					
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.					
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.					
II.E.3. Child uses sentences with more than one phrase.					
II.E.4. Child combines more than one idea using complex sentences.					
II.E.5. Child combines sentences that give lots of detail, sticks to the topic, and clearly communicates intended meaning.					
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.					
II.E.7. Child uses single words and					

simple phrases to communicate meaning in social situations.					
II.E.8. Child attempts to use new vocabulary and grammar in speech.					

Note. X indicates objective found; blank indicates no objective found.

Table C10b

PPCD Social Studies/Science Scope & Sequence Aligned to TEA PK Guidelines for Social and Language Domains for January

TEA PK Guidelines I. Social/Emotional Development Domain	PPCD January Scope & Sequence Social Studies/Science				
	Total activities in the drive	#of activities with objectives	# of activities **without** any objectives	#of activities matching domain skills	# of activities do not match the domain skills
Objectives	5	4	1	**2**	3
A. Self-Concept Skills					
I.A.1. Child is aware of where own body is in space and respects personal boundaries.					
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.					
I.A.3. Child shows reasonable opinion of his own abilities and limitations.					
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.					
B. Self-Regulation Skills 1. Behavior Control					
I.B.1.a. Child follows classroom rules and routines with occasional reminders.					
I.B.1.b. Child takes care of and manages classroom materials.					
I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.					

B. Self-Regulation Skills 2. Emotional Control					
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.					
I.B.2.b. Child can communicate basic emotions/feelings.					
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.					
B. Self-Regulation Skills 3. Control of Attention					
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.					
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.	X				
C. Relationships with Others					
I.C.1. Child uses effective verbal and non-verbal communication skills to build relationships with teachers/adults.					
I.C.2. Child assumes various roles and responsibilities as part of a classroom community.					
I.C.3. Child shows competence in initiating social interactions.					
I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that					

share a common plan and goal.					
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.					
I.C.6. Child demonstrates empathy and caring for others.					
I.C.7. Child interacts with a variety of playmates and may have preferred friends.					
D. Social Awareness Skills					
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.					
PK Guidelines II. Language and Communication Domain					
A. Listening Comprehension Skills					
II.A.1. Child shows understanding by responding appropriately.					
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.					
II.A.3. Child shows understanding of the language being spoken by teachers and peers.					
B. Speaking (Conversation) Skills					
II.B.1. Child is able to use language for different purposes.					
II.B.2. Child engages in conversations in appropriate ways.					
II.B.3. Child provides appropriate					

information for various situations.					
II.B.4. Child demonstrates knowledge of verbal conversational rules.					
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.					
II.B.6. Child matches language to social contexts.					
C. Speech Production Skills					
II.C.1. Child's speech is understood by both the teacher and other adults in the school.					
II.C.2. Child perceives differences between similar sounding words.					
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.					
D. Vocabulary Skills					
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.	X				
II.D.2. Child demonstrates understanding of terms used in the instructional language of the classroom.					
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.					
II.D.4. Child uses a large speaking					

vocabulary, adding several new words daily.					
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.					
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)					
E. Sentences and Structure Skills					
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.					
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.					
II.E.3. Child uses sentences with more than one phrase.					
II.E.4. Child combines more than one idea using complex sentences.					
II.E.5. Child combines sentences that give lots of detail, sticks to the topic, and clearly communicates intended meaning.					
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.					
II.E.7. Child uses single words and					

simple phrases to communicate meaning in social situations.					
II.E.8. Child attempts to use new vocabulary and grammar in speech.					

Note. X indicates objective found; blank indicates no objective found.

Table C11a

PPCD Reading Scope & Sequence Aligned to TEA PK Guidelines for Social and Language Domains for February

TEA PK Guidelines I. Social/Emotional Development Domain	PPCD February Scope & Sequence Reading				
	Total activities in the drive	#of activities with objectives	# of activities **without** any objectives	#of activities matching domain skills	# of activities do not match the domain skills
Objectives	9	8	1	**1**	8
A. Self-Concept Skills					
I.A.1. Child is aware of where own body is in space and respects personal boundaries.					
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.					
I.A.3. Child shows reasonable opinion of his own abilities and limitations.					
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.					
B. Self-Regulation Skills 1. Behavior Control					
I.B.1.a. Child follows classroom rules and routines with occasional reminders.					
I.B.1.b. Child takes care of and manages classroom materials.					
I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.					

B. Self-Regulation Skills 2. Emotional Control					
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.					
I.B.2.b. Child can communicate basic emotions/feelings.					
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.					
B. Self-Regulation Skills 3. Control of Attention					
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.					
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.					
C. Relationships with Others					
I.C.1. Child uses effective verbal and non-verbal communication skills to build relationships with teachers/adults.					
I.C.2. Child assumes various roles and responsibilities as part of a classroom community.					
I.C.3. Child shows competence in initiating social interactions.					
I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that					

share a common plan and goal.					
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.					
I.C.6. Child demonstrates empathy and caring for others.					
I.C.7. Child interacts with a variety of playmates and may have preferred friends.					
D. Social Awareness Skills					
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.					
PK Guidelines II. Language and Communication Domain					
A. Listening Comprehension Skills					
II.A.1. Child shows understanding by responding appropriately.					
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.					
II.A.3. Child shows understanding of the language being spoken by teachers and peers.					
B. Speaking (Conversation) Skills					
II.B.1. Child is able to use language for different purposes.					
II.B.2. Child engages in conversations in appropriate ways.					
II.B.3. Child provides appropriate					

information for various situations.					
II.B.4. Child demonstrates knowledge of verbal conversational rules.					
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.					
II.B.6. Child matches language to social contexts.					
C. Speech Production Skills					
II.C.1. Child's speech is understood by both the teacher and other adults in the school.					
II.C.2. Child perceives differences between similar sounding words.					
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.					
D. Vocabulary Skills					
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.					
II.D.2. Child demonstrates understanding of terms used in the instructional language of the classroom.	X				
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.					
II.D.4. Child uses a large speaking					

vocabulary, adding several new words daily.					
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.	X				
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)					
E. Sentences and Structure Skills					
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.					
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.					
II.E.3. Child uses sentences with more than one phrase.					
II.E.4. Child combines more than one idea using complex sentences.					
II.E.5. Child combines sentences that give lots of detail, sticks to the topic, and clearly communicates intended meaning.					
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.					
II.E.7. Child uses single words and					

simple phrases to communicate meaning in social situations.					
II.E.8. Child attempts to use new vocabulary and grammar in speech.					

Note. X indicates objective found; blank indicates no objective found.

Table C11b

PPCD Social Studies/Science Scope & Sequence Aligned to TEA PK Guidelines for Social and Language Domains for February

TEA PK Guidelines I. Social/Emotional Developmental Domain	PPCD February Scope & Sequence Social Studies/Science				
	Total activities in the drive	#of activities with objectives	# of activities **without** any objectives	#of activities matching domain skills	# of activities do not match the domain skills
Objectives	8	8	0	**5**	3
A. Self-Concept Skills					
I.A.1. Child is aware of where own body is in space and respects personal boundaries.					
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.					
I.A.3. Child shows reasonable opinion of his own abilities and limitations.					
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.					
B. Self-Regulation Skills 1. Behavior Control					
I.B.1.a. Child follows classroom rules and routines with occasional reminders.	X				
I.B.1.b. Child takes care of and manages classroom materials.	X				
I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.	X				

B. Self-Regulation Skills 2. Emotional Control					
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.					
I.B.2.b. Child can communicate basic emotions/feelings.					
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.					
B. Self-Regulation Skills 3. Control of Attention					
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.					
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.	X				
C. Relationships with Others					
I.C.1. Child uses effective verbal and non-verbal communication skills to build relationships with teachers/adults.					
I.C.2. Child assumes various roles and responsibilities as part of a classroom community.					
I.C.3. Child shows competence in initiating social interactions.					
I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that					

share a common plan and goal.					
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.					
I.C.6. Child demonstrates empathy and caring for others.					
I.C.7. Child interacts with a variety of playmates and may have preferred friends.					
D. Social Awareness Skills					
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.					
PK Guidelines II. Language and Communication Domain					
A. Listening Comprehension Skills					
II.A.1. Child shows understanding by responding appropriately.	X				
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.					
II.A.3. Child shows understanding of the language being spoken by teachers and peers.					
B. Speaking (Conversation) Skills					
II.B.1. Child is able to use language for different purposes.					
II.B.2. Child engages in conversations in appropriate ways.					
II.B.3. Child provides appropriate					

information for various situations.					
II.B.4. Child demonstrates knowledge of verbal conversational rules.					
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.					
II.B.6. Child matches language to social contexts.					
C. Speech Production Skills					
II.C.1. Child's speech is understood by both the teacher and other adults in the school.					
II.C.2. Child perceives differences between similar sounding words.					
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.					
D. Vocabulary Skills					
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.	X				
II.D.2. Child demonstrates understanding of terms used in the instructional language of the classroom.					
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.					
II.D.4. Child uses a large speaking					

vocabulary, adding several new words daily.					
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.					
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)					
E. Sentences and Structure Skills					
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.					
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.					
II.E.3. Child uses sentences with more than one phrase.					
II.E.4. Child combines more than one idea using complex sentences.					
II.E.5. Child combines sentences that give lots of detail, sticks to the topic, and clearly communicates intended meaning.					
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.					
II.E.7. Child uses single words and					

simple phrases to communicate meaning in social situations.					
II.E.8. Child attempts to use new vocabulary and grammar in speech.					

Note. X indicates objective found; blank indicates no objective found.

Table C12a

PPCD Reading Scope & Sequence Aligned to TEA PK Guidelines for Social and Language Domains for March

TEA PK Guidelines I. Social/Emotional Developmental Domain	PPCD March Scope & Sequence Reading					
	Total activities in the drive	#of activities with objectives	# of activities **without** any objectives	#of activities matching domain skills	# of activities do not match the domain skills	
Objectives	6	5	1	**0**	6	Due to 0 activities matching the domain skills, NA for completion of the rest of the table
A. Self-Concept Skills						
I.A.1. Child is aware of where own body is in space and respects personal boundaries.						
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.						
I.A.3. Child shows reasonable opinion of his own abilities and limitations.						
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.						
B. Self-Regulation Skills 1. Behavior Control						
I.B.1.a. Child follows classroom rules						

and routines with occasional reminders.						
I.B.1.b. Child takes care of and manages classroom materials.						
I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.						
B. Self-Regulation Skills 2. Emotional Control						
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.						
I.B.2.b. Child can communicate basic emotions/feelings.						
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.						
B. Self-Regulation Skills 3. Control of Attention						
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.						
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.						
C. Relationships with Others						
I.C.1. Child uses effective verbal and non-verbal communication skills to build relationships with teachers/adults.						
I.C.2. Child assumes various roles						

and responsibilities as part of a classroom community.						
I.C.3. Child shows competence in initiating social interactions.						
I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that share a common plan and goal.						
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.						
I.C.6. Child demonstrates empathy and caring for others.						
I.C.7. Child interacts with a variety of playmates and may have preferred friends.						
D. Social Awareness Skills						
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.						
PK Guidelines II. Language and Communication Domain						
A. Listening Comprehension Skills						
II.A.1. Child shows understanding by responding appropriately.						
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.						
II.A.3. Child shows understanding of the language being spoken by						

teachers and peers.						
B. Speaking (Conversation) Skills						
II.B.1. Child is able to use language for different purposes.						
II.B.2. Child engages in conversations in appropriate ways.						
II.B.3. Child provides appropriate information for various situations.						
II.B.4. Child demonstrates knowledge of verbal conversational rules.						
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.						
II.B.6. Child matches language to social contexts.						
C. Speech Production Skills						
II.C.1. Child's speech is understood by both the teacher and other adults in the school.						
II.C.2. Child perceives differences between similar sounding words.						
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.						
D. Vocabulary Skills						
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.						
II.D.2. Child demonstrates understanding of terms used in the instructional language of the						

classroom.						
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.						
II.D.4. Child uses a large speaking vocabulary, adding several new words daily.						
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.						
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)						
E. Sentences and Structure Skills						
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.						
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.						
II.E.3. Child uses sentences with more than one phrase.						
II.E.4. Child combines more than one idea using complex sentences.						
II.E.5. Child combines sentences that give lots of detail, sticks to the						

topic, and clearly communicates intended meaning.						
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.						
II.E.7. Child uses single words and simple phrases to communicate meaning in social situations.						
II.E.8. Child attempts to use new vocabulary and grammar in speech.						

Note. X indicates objective found; blank indicates no objective found.

Table C12b

PPCD Social Studies/Science Scope & Sequence Aligned to TEA PK Guidelines for Social and Language Domains for March

TEA PK Guidelines I. Social/Emotional Development Domain	PPCD March Scope & Sequence Social Studies/Science				
	Total activities in the drive	#of activities with objectives	# of activities **without** any objectives	#of activities matching domain skills	# of activities do not match the domain skills
Objectives	5	5	0	**5**	0
A. Self-Concept Skills					
I.A.1. Child is aware of where own body is in space and respects personal boundaries.					
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.					
I.A.3. Child shows reasonable opinion of his own abilities and limitations.					
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.					
B. Self-Regulation Skills 1. Behavior Control					
I.B.1.a. Child follows classroom rules and routines with occasional reminders.	X				
I.B.1.b. Child takes care of and manages classroom materials.	X				
I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.					

B. Self-Regulation Skills 2. Emotional Control					
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.					
I.B.2.b. Child can communicate basic emotions/feelings.					
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.					
B. Self-Regulation Skills 3. Control of Attention					
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.					
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.	X				
C. Relationships with Others					
I.C.1. Child uses effective verbal and non-verbal communication skills to build relationships with teachers/adults.					
I.C.2. Child assumes various roles and responsibilities as part of a classroom community.					
I.C.3. Child shows competence in initiating social interactions.					
I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that					

share a common plan and goal.					
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.					
I.C.6. Child demonstrates empathy and caring for others.					
I.C.7. Child interacts with a variety of playmates and may have preferred friends.					
D. Social Awareness Skills					
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.					
PK Guidelines II. Language and Communication Domain					
A. Listening Comprehension Skills					
II.A.1. Child shows understanding by responding appropriately.	X				
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.					
II.A.3. Child shows understanding of the language being spoken by teachers and peers.					
B. Speaking (Conversation) Skills					
II.B.1. Child is able to use language for different purposes.					
II.B.2. Child engages in conversations in appropriate ways.					
II.B.3. Child provides appropriate					

information for various situations.					
II.B.4. Child demonstrates knowledge of verbal conversational rules.					
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.					
II.B.6. Child matches language to social contexts.					
C. Speech Production Skills					
II.C.1. Child's speech is understood by both the teacher and other adults in the school.					
II.C.2. Child perceives differences between similar sounding words.					
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.					
D. Vocabulary Skills					
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.					
II.D.2. Child demonstrates understanding of terms used in the instructional language of the classroom.	X				
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.					
II.D.4. Child uses a large speaking					

vocabulary, adding several new words daily.					
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.					
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)					
E. Sentences and Structure Skills					
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.					
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.					
II.E.3. Child uses sentences with more than one phrase.					
II.E.4. Child combines more than one idea using complex sentences.					
II.E.5. Child combines sentences that give lots of detail, sticks to the topic, and clearly communicates intended meaning.					
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.					
II.E.7. Child uses single words and					

simple phrases to communicate meaning in social situations.					
II.E.8. Child attempts to use new vocabulary and grammar in speech.					

Note. X indicates objective found; blank indicates no objective found.

Table C13a

PPCD Reading Scope & Sequence Aligned to TEA PK Guidelines for Social and Language Domains for April

TEA PK Guidelines I. Social/Emotional Development Domain	PPCD April Scope & Sequence Reading					
	Total activities in the drive	#of activities with objectives	# of activities **without** any objectives	#of activities matching domain skills	# of activities do not match the domain skills	
Objectives	6	5	1	**0**	6	Due to 0 activities matching the domain skills, NA for completion of the rest of the table
A. Self-Concept Skills						
I.A.1. Child is aware of where own body is in space and respects personal boundaries.						
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.						
I.A.3. Child shows reasonable opinion of his own abilities and limitations.						
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.						
B. Self-Regulation Skills 1. Behavior Control						
I.B.1.a. Child follows classroom rules						

and routines with occasional reminders.						
I.B.1.b. Child takes care of and manages classroom materials.						
I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.						
B. Self-Regulation Skills 2. Emotional Control						
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.						
I.B.2.b. Child can communicate basic emotions/feelings.						
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.						
B. Self-Regulation Skills 3. Control of Attention						
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.						
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.						
C. Relationships with Others						
I.C.1. Child uses effective verbal and non-verbal communication skills to build relationships with teachers/adults.						
I.C.2. Child assumes various roles						

and responsibilities as part of a classroom community.						
I.C.3. Child shows competence in initiating social interactions.						
I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that share a common plan and goal.						
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.						
I.C.6. Child demonstrates empathy and caring for others.						
I.C.7. Child interacts with a variety of playmates and may have preferred friends.						
D. Social Awareness Skills						
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.						
PK Guidelines II. Language and Communication Domain						
A. Listening Comprehension Skills						
II.A.1. Child shows understanding by responding appropriately.						
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.						
II.A.3. Child shows understanding of the language being spoken by						

teachers and peers.						
B. Speaking (Conversation) Skills						
II.B.1. Child is able to use language for different purposes.						
II.B.2. Child engages in conversations in appropriate ways.						
II.B.3. Child provides appropriate information for various situations.						
II.B.4. Child demonstrates knowledge of verbal conversational rules.						
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.						
II.B.6. Child matches language to social contexts.						
C. Speech Production Skills						
II.C.1. Child's speech is understood by both the teacher and other adults in the school.						
II.C.2. Child perceives differences between similar sounding words.						
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.						
D. Vocabulary Skills						
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.						
II.D.2. Child demonstrates understanding of terms used in the instructional language of the						

classroom.						
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.						
II.D.4. Child uses a large speaking vocabulary, adding several new words daily.						
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.						
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)						
E. Sentences and Structure Skills						
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.						
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.						
II.E.3. Child uses sentences with more than one phrase.						
II.E.4. Child combines more than one idea using complex sentences.						
II.E.5. Child combines sentences that give lots of detail, sticks to the						

topic, and clearly communicates intended meaning.						
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.						
II.E.7. Child uses single words and simple phrases to communicate meaning in social situations.						
II.E.8. Child attempts to use new vocabulary and grammar in speech.						

Note. X indicates objective found; blank indicates no objective found.

Table C13b

PPCD Social Studies/Science Scope & Sequence Aligned to TEA PK Guidelines for Social and Language Domains for April

TEA PK Guidelines I. Social/Emotional Development Domain	PPCD April Scope & Sequence Social Studies/Science					
	Total activities in the drive	#of activities with objectives	# of activities **without** any objectives	#of activities matching domain skills	# of activities do not match the domain skills	
Objectives	1	1	0	**0**	1	Due to 0 activities matching the domain skills, NA for completion of the rest of the table
A. Self-Concept Skills						
I.A.1. Child is aware of where own body is in space and respects personal boundaries.						
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.						
I.A.3. Child shows reasonable opinion of his own abilities and limitations.						
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.						

B. Self-Regulation Skills 1. Behavior Control						
I.B.1.a. Child follows classroom rules and routines with occasional reminders.						
I.B.1.b. Child takes care of and manages classroom materials.						
I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.						
B. Self-Regulation Skills 2. Emotional Control						
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.						
I.B.2.b. Child can communicate basic emotions/feelings.						
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.						
B. Self-Regulation Skills 3. Control of Attention						
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.						
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.						
C. Relationships with Others						

I.C.1. Child uses effective verbal and non-verbal communication skills to build relationships with teachers/adults.						
I.C.2. Child assumes various roles and responsibilities as part of a classroom community.						
I.C.3. Child shows competence in initiating social interactions.						
I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that share a common plan and goal.						
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.						
I.C.6. Child demonstrates empathy and caring for others.						
I.C.7. Child interacts with a variety of playmates and may have preferred friends.						
D. Social Awareness Skills						
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.						
PK Guidelines II. Language and Communication Domain						
A. Listening Comprehension Skills						

II.A.1. Child shows understanding by responding appropriately.						
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.						
II.A.3. Child shows understanding of the language being spoken by teachers and peers.						
B. Speaking (Conversation) Skills						
II.B.1. Child is able to use language for different purposes.						
II.B.2. Child engages in conversations in appropriate ways.						
II.B.3. Child provides appropriate information for various situations.						
II.B.4. Child demonstrates knowledge of verbal conversational rules.						
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.						
II.B.6. Child matches language to social contexts.						
C. Speech Production Skills						
II.C.1. Child's speech is understood by both the teacher and other adults in the school.						
II.C.2. Child perceives differences between similar sounding words.						

II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.						
D. Vocabulary Skills						
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.						
II.D.2. Child demonstrates understanding of terms used in the instructional language of the classroom.						
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.						
II.D.4. Child uses a large speaking vocabulary, adding several new words daily.						
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.						
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)						
E. Sentences and Structure Skills						
II.E.1. Child typically uses						

complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.						
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.						
II.E.3. Child uses sentences with more than one phrase.						
II.E.4. Child combines more than one idea using complex sentences.						
II.E.5. Child combines sentences that give lots of detail, sticks to the topic, and clearly communicates intended meaning.						
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.						
II.E.7. Child uses single words and simple phrases to communicate meaning in social situations.						
II.E.8. Child attempts to use new vocabulary and grammar in speech.						

Note. X indicates objective found; blank indicates no objective found.

Table C14a

PPCD Reading Scope & Sequence Aligned to TEA PK Guidelines for Social and Language Domains for May

TEA PK Guidelines I. Social/Emotional Development Domain	PPCD May Scope & Sequence Reading					
	Total activities in the drive	#of activities with objectives	# of activities **without** any objectives	#of activities matching domain skills	# of activities do not match the domain skills	
Objectives	6	5	1	**0**	6	Due to 0 activities matching the domain skills, NA for completion of the rest of the table
A. Self-Concept Skills						
I.A.1. Child is aware of where own body is in space and respects personal boundaries.						
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.						
I.A.3. Child shows reasonable opinion of his own abilities and limitations.						
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.						

B. Self-Regulation Skills 1. Behavior Control						
I.B.1.a. Child follows classroom rules and routines with occasional reminders.						
I.B.1.b. Child takes care of and manages classroom materials.						
I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.						
B. Self-Regulation Skills 2. Emotional Control						
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.						
I.B.2.b. Child can communicate basic emotions/feelings.						
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.						
B. Self-Regulation Skills 3. Control of Attention						
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.						
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.						
C. Relationships with Others						

I.C.1. Child uses effective verbal and non-verbal communication skills to build relationships with teachers/adults.						
I.C.2. Child assumes various roles and responsibilities as part of a classroom community.						
I.C.3. Child shows competence in initiating social interactions.						
I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that share a common plan and goal.						
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.						
I.C.6. Child demonstrates empathy and caring for others.						
I.C.7. Child interacts with a variety of playmates and may have preferred friends.						
D. Social Awareness Skills						
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.						
PK Guidelines II. Language and Communication Domain						
A. Listening Comprehension Skills						

II.A.1. Child shows understanding by responding appropriately.						
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.						
II.A.3. Child shows understanding of the language being spoken by teachers and peers.						
B. Speaking (Conversation) Skills						
II.B.1. Child is able to use language for different purposes.						
II.B.2. Child engages in conversations in appropriate ways.						
II.B.3. Child provides appropriate information for various situations.						
II.B.4. Child demonstrates knowledge of verbal conversational rules.						
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.						
II.B.6. Child matches language to social contexts.						
C. Speech Production Skills						
II.C.1. Child's speech is understood by both the teacher and other adults in the school.						
II.C.2. Child perceives differences between similar sounding words.						

II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.						
D. Vocabulary Skills						
II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.						
II.D.2. Child demonstrates understanding of terms used in the instructional language of the classroom.						
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.						
II.D.4. Child uses a large speaking vocabulary, adding several new words daily.						
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.						
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)						
E. Sentences and Structure Skills						
II.E.1. Child typically uses						

complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.						
II.E.2. Child uses regular and irregular plurals, regular past tense, personal and possessive pronouns, and subject-verb agreement.						
II.E.3. Child uses sentences with more than one phrase.						
II.E.4. Child combines more than one idea using complex sentences.						
II.E.5. Child combines sentences that give lots of detail, sticks to the topic, and clearly communicates intended meaning.						
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.						
II.E.7. Child uses single words and simple phrases to communicate meaning in social situations.						
II.E.8. Child attempts to use new vocabulary and grammar in speech.						

Note. X indicates objective found; blank indicates no objective found.

Table C14b

PPCD Social Studies/Science Scope & Sequence Aligned to TEA PK Guidelines for Social and Language Domains for May

TEA PK Guidelines I. Social/Emotional Development Domain	PPCD May Scope & Sequence Social Studies/Science				
	Total activities in the drive	#of activities with objectives	# of activities **without** any objectives	#of activities matching domain skills	# of activities do not match the domain skills
Objectives	4	3	1	**2**	2
A. Self-Concept Skills					
I.A.1. Child is aware of where own body is in space and respects personal boundaries.					
I.A.2. Child shows self-awareness and can express pride in age appropriate abilities and skills.					
I.A.3. Child shows reasonable opinion of his own abilities and limitations.					
I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.					
B. Self-Regulation Skills 1. Behavior Control					
I.B.1.a. Child follows classroom rules and routines with occasional reminders.					
I.B.1.b. Child takes care of and manages classroom materials.					

I.B.1.c. Child regulates his own behavior with occasional reminders or assistance from teacher.					
B. Self-Regulation Skills 2. Emotional Control					
I.B.2.a. Child begins to understand difference and connection between emotions/feelings and behaviors.					
I.B.2.b. Child can communicate basic emotions/feelings.					
I.B.2.c. Child is able to increase or decrease intensity of emotions more consistently, although adult guidance is sometimes necessary.					
B. Self-Regulation Skills 3. Control of Attention					
I.B.3.a. Child sustains attention to personally chosen or routine (teacher-directed) tasks until completed.					
I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.	X				
C. Relationships with Others					
I.C.1. Child uses effective verbal and non-verbal communication skills to build relationships with teachers/adults.					
I.C.2. Child assumes various roles and responsibilities as part of a					

classroom community.					
I.C.3. Child shows competence in initiating social interactions.					
I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that share a common plan and goal.					
I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.					
I.C.6. Child demonstrates empathy and caring for others.					
I.C.7. Child interacts with a variety of playmates and may have preferred friends.					
D. Social Awareness Skills					
I.D.1. Child demonstrates an understanding that others have perspectives and feelings that are different from her own.					
PK Guidelines II. Language and Communication Domain					
A. Listening Comprehension Skills					
II.A.1. Child shows understanding by responding appropriately.					
II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.					

II.A.3. Child shows understanding of the language being spoken by teachers and peers.					
B. Speaking (Conversation) Skills					
II.B.1. Child is able to use language for different purposes.					
II.B.2. Child engages in conversations in appropriate ways.					
II.B.3. Child provides appropriate information for various situations.					
II.B.4. Child demonstrates knowledge of verbal conversational rules.					
II.B.5. Child demonstrates knowledge of nonverbal conversational rules.					
II.B.6. Child matches language to social contexts.					
C. Speech Production Skills					
II.C.1. Child's speech is understood by both the teacher and other adults in the school.					
II.C.2. Child perceives differences between similar sounding words.					
II.C.3. Child investigates and demonstrates growing understanding of the sounds and intonation of language.					
D. Vocabulary Skills					
II.D.1. Child uses a wide variety of	X				

words to label and describe people, places, things, and actions.					
II.D.2. Child demonstrates understanding of terms used in the instructional language of the classroom.					
II.D.3. Child demonstrates understanding in a variety of ways or knowing the meaning of 3,000 to 4,000 words many more than he or she uses.					
II.D.4. Child uses a large speaking vocabulary, adding several new words daily.					
II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.					
II.D.6. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases in English. (ELL)					
E. Sentences and Structure Skills					
II.E.1. Child typically uses complete sentences of four or more words and grammatical complexity usually with subject, verb, and object order.					
II.E.2. Child uses regular and irregular plurals, regular past tense,					

personal and possessive pronouns, and subject-verb agreement.					
II.E.3. Child uses sentences with more than one phrase.					
II.E.4. Child combines more than one idea using complex sentences.					
II.E.5. Child combines sentences that give lots of detail, sticks to the topic, and clearly communicates intended meaning.					
II.E.6. Child engages in various forms of nonverbal communication with those who do not speak her native language.					
II.E.7. Child uses single words and simple phrases to communicate meaning in social situations.					
II.E.8. Child attempts to use new vocabulary and grammar in speech.					

Note. X indicates objective found; blank indicates no objective found.

Appendix D

Complete Curriculum Mapping Crossmatch Tables for Reading and Social Studies

Table D1

Crossmatch of Social/Emotional Domain and Language/Communication Domain with Reading Objectives

Objectives	PPCD	PK
I.A.1.	N	N
I.A.2.	N	N
I.A.3.	N	N
I.A.4.	Y	N
I.B.1.a.	Y	N
I.B.1.b.	Y	N
I.B.1.c.	N	N
I.B.2.a.	N	N
I.B.2.b.	N	N
I.B.2.c.	N	N
I.B.3.a.	Y	N
I.B.3.b.	Y	N
I.C.1.	Y	N
I.C.2.	N	N
I.C.3.	Y	N
I.C.4.	N	N
I.C.5.	N	N
I.C.6.	N	N
I.C.7.	N	N
I.D.1.	N	N
II.A.1.	**Y**	**Y**
II.A.2.	N	Y
II.A.3.	N	Y
II.B.1.	**Y**	**Y**
II.B.2.	N	Y
II.B.3.	N	Y
II.B.4.	N	Y
II.B.5.	N	Y
II.B.6.	N	Y
II.C.1.	N	Y
II.C.2.	N	Y
II.C.3.	N	Y
II.D.1.	**Y**	**Y**

Objectives	PPCD	PK
II.D.2.	**Y**	**Y**
II.D.3.	N	Y
II.D.4.	N	Y
II.D.5	**Y**	**Y**
II.D.6.	N	Y
II.E.1.	N	Y
II.E.2.	N	Y
II.E.3.	N	Y
II.E.4.	N	Y
II.E.5.	N	Y
II.E.6.	N	Y
II.E.7.	N	Y
II.E.8.	N	Y

Note. PPCD= Preschool Program for Children with Disabilities; PK= Prekindergarten; Y= Yes; N=No

Table D2

Crossmatch of Social/Emotional Domain and Language/Communication Domains with Social Studies Objectives

Objectives	PPCD	PK
I.A.1.	N	Y
I.A.2.	N	Y
I.A.3.	N	N
I.A.4.	Y	N
I.B.1.a.	**Y**	**Y**
I.B.1.b.	**Y**	**Y**
I.B.1.c.	**Y**	**Y**
I.B.2.a.	N	N
I.B.2.b.	N	N
I.B.2.c.	N	N
I.B.3.a.	Y	N
I.B.3.b.	Y	N
I.C.1.	N	N
I.C.2.	N	N
I.C.3.	N	N
I.C.4.	N	N
I.C.5.	N	N
I.C.6.	N	N
I.C.7.	N	N
I.D.1.	N	N

Objectives	PPCD	PK
II.A.1.	Y	N
II.A.2.	N	N
II.A.3.	N	N
II.B.1.	Y	N
II.B.2.	N	N
II.B.3.	N	N
II.B.4.	N	N
II.B.5.	N	N
II.B.6.	N	N
II.C.1.	N	N
II.C.2.	N	N
II.C.3.	N	N
II.D.1.	Y	N
II.D.2.	Y	N
II.D.3.	N	N
II.D.4.	N	N
II.D.5	N	N
II.D.6.	N	N
II.E.1.	N	N
II.E.2.	N	N
II.E.3.	N	N
II.E.4.	N	N
II.E.5.	N	N
II.E.6.	N	N
II.E.7.	N	N
II.E.8.	N	N

Note. PPCD= Preschool Program for Children with Disabilities; PK= Prekindergarten; Y= Yes; N=No

Appendix E

Teacher Survey SPSS Data

Significant Pearson Chi-Square Data for Teacher Survey

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q14a * Type of Teaching Certificate2	66	100.0%	0	0.0%	66	100.0%

Q14a * Type of Teaching Certificate2 Crosstabulation

Count

		Type of Teaching Certificate2		
		1	2	Total
Q14a	1	12	6	18
	2	5	10	15
	3	26	7	33
Total		43	23	66

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.410[a]	2	.009
Likelihood Ratio	9.223	2	.010
Linear-by-Linear Association	1.629	1	.202
N of Valid Cases	66		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.23.

Crosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q15a * Q5a	66	100.0%	0	0.0%	66	100.0%

Q15a * Q5a Crosstabulation

Count

		Q5a		
		1	2	Total
Q15a	1	14	6	20
	2	7	12	19
	3	10	17	27
Total		31	35	66

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6.111[a]	2	.047
Likelihood Ratio	6.216	2	.045
Linear-by-Linear Association	4.540	1	.033
N of Valid Cases	66		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.92.

Crosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q15a * Q6a	66	100.0%	0	0.0%	66	100.0%

Q15a * Q6a Crosstabulation

Count

		Q6a		
		1	2	Total
Q15a	1	17	3	20
	2	7	12	19
	3	17	10	27
Total		41	25	66

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.617[a]	2	.008
Likelihood Ratio	10.067	2	.007
Linear-by-Linear Association	1.711	1	.191
N of Valid Cases	66		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.20.

Insignificant Pearson Chi-Square Data for Teacher Survey

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q14a * Q5a	66	100.0%	0	0.0%	66	100.0%

Q14a * Q5a Crosstabulation

Count

		Q5a		
		1	2	Total
Q14a	1	10	8	18
	2	8	7	15
	3	13	20	33
Total		31	35	66

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.537[a]	2	.464
Likelihood Ratio	1.543	2	.462
Linear-by-Linear Association	1.360	1	.244
N of Valid Cases	66		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.05.

Crosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q14a * Q6a	66	100.0%	0	0.0%	66	100.0%

Q14a * Q6a Crosstabulation

Count

		Q6a		
		1	2	Total
Q14a	1	13	5	18
	2	10	5	15
	3	18	15	33
Total		41	25	66

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.717[a]	2	.424
Likelihood Ratio	1.737	2	.420
Linear-by-Linear Association	1.640	1	.200
N of Valid Cases	66		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.68.

Crosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q14a * Q7a	66	100.0%	0	0.0%	66	100.0%

Q14a * Q7a Crosstabulation

Count

		Q7a		
		1	2	Total
Q14a	1	12	6	18
	2	10	5	15
	3	18	15	33
Total		40	26	66

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.015[a]	2	.602
Likelihood Ratio	1.019	2	.601
Linear-by-Linear Association	.828	1	.363
N of Valid Cases	66		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.91.

Crosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q15a * Q7a	66	100.0%	0	0.0%	66	100.0%

Q15a * Q7a Crosstabulation

Count

		Q7a		
		1	2	Total
Q15a	1	14	6	20
	2	14	5	19
	3	12	15	27
Total		40	26	66

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.054[a]	2	.080
Likelihood Ratio	5.072	2	.079
Linear-by-Linear Association	3.475	1	.062
N of Valid Cases	66		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.48.

T-Test Data for Teacher Survey

Group Statistics

	Type of Teaching Certificate2	N	Mean	Std. Deviation	Std. Error Mean
Sum_17_20	1	43	8.53	3.066	.467
	2	23	7.91	2.644	.551

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Sum_17_20	Equal variances assumed	2.912	.093	.822	64	.414	.622	.756	-.889	2.133
	Equal variances not assumed			.860	51.154	.394	.622	.723	-.829	2.073

T-Test

Group Statistics

	Type of Teaching Certificate2	N	Mean	Std. Deviation	Std. Error Mean
Sum_21_25	1	43	9.47	3.555	.542
	2	23	9.04	3.624	.756

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Sum_21_25	Equal variances assumed	.000	.998	.456	64	.650	.422	.924	-1.425	2.269
	Equal variances not assumed			.453	44.320	.652	.422	.930	-1.452	2.296

T-Test

Group Statistics

	Type of Teaching Certificate2	N	Mean	Std. Deviation	Std. Error Mean
Sum_26_29	1	43	7.02	2.874	.438
	2	23	6.91	2.592	.541

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Sum_26_29	Equal variances assumed	.785	.379	.153	64	.879	.110	.718	-1.325	1.545
	Equal variances not assumed			.158	49.285	.875	.110	.696	-1.288	1.508

T-Test

Group Statistics

	Q6a	N	Mean	Std. Deviation	Std. Error Mean
Sum_17_20	1	41	8.12	3.092	.483
	2	25	8.64	2.644	.529

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Sum_17_20	Equal variances assumed	1.007	.319	-.696	64	.489	-.518	.744	-2.004	.968
	Equal variances not assumed			-.723	56.954	.472	-.518	.716	-1.952	.916

T-Test

Group Statistics

	Q6a	N	Mean	Std. Deviation	Std. Error Mean

Sum_21_25	1	41	8.71	3.579	.559
	2	25	10.32	3.351	.670

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Sum_21_25	Equal variances assumed	1.845	.179	-1.818	64	.074	-1.613	.887	-3.385	.159
	Equal variances not assumed			-1.848	53.484	.070	-1.613	.873	-3.363	.137

T-Test

Group Statistics

	Q6a	N	Mean	Std. Deviation	Std. Error Mean
Sum_26_29	1	41	6.44	2.730	.426
	2	25	7.88	2.619	.524

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
								95% Confidence Interval of the Difference	
F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper

Sum_26_29	Equal variances assumed	.561	.456	-2.112	64	.039	-1.441	.682	-2.804	-.078
	Equal variances not assumed			-2.134	52.504	.038	-1.441	.675	-2.796	-.086